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Digital Camera Magazine

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Digital Camera Welcome

Professional or amateur – it's all the same to me

elcome to Digital Camera Magazine. Over the past few weeks, we've been discussing the format of the next Digital Camera Magazine Photographer of the Year competition and deciding on such important topics as the categories to include and whether or not to split the competition between amateur and professional photographers. We'll be announcing the 2005 competition very soon, but in the meantime the whole thing got me thinking about the difference between amateur and professional photographers.

Fundamentally, there's only one distinguishing feature: professionals get paid for their photographs, whereas amateurs don't. But is there more to this divide than simple financial reward? I guess what we're really talking about when we discuss pro versus amateur is – on some intuitive level – quality. We expect professional shots to stand out from their amateur counterparts, to have finer detail, better composition and just, in essence, to look better. Of course, it's easy to point to photographers at the top of their profession, such as Stephen Hyde (featured this issue, starting on page 38) whose images are clearly superb, but at the lower end of professional photography we run into difficulties.

How many times have you gone to a wedding and come back with a collection of shots that are, it turns out, far better than the official photos? It's certainly happened to me a few times. The point I'm making is that being paid to do it doesn't automatically make you a good photographer, just as doing it as your hobby doesn't automatically make your images worse. So should we pit the professionals against the amateurs in the Photographer of the Year 2005 competition? I want to know what you think. Discuss it online at www.dcmag.co.uk/forums or email me directly at editor.dcm@futurenet.co.uk. In the meantime, enjoy the issue!

"HAVE YOU **TAKEN** WEDDING SHOTS THAT ARE BETTER THAN THE OFFICIAL PHOTOS?"

Tell us what you think of this and other issues on our www.dcmag.co.uk/forum



Adam Evans Editor editor.dcm@futurenet.co.uk

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- We have a cast-iron policy of editorial independence. All our kit is reviewed as-sold. We discourage our journalists from accepting gifts from advertisers.

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- Customer services/subscriptions departments email: customerservice@futurenet.co.uk

Meet your experts...

Rod Lawton



Andrea Thompson Deputy editor Studied visual arts at university and is a keen amateur photographer in her spare time.



Reviewer and writer Rod has been testing cameras since the very first digital cameras came out.



Tim Shelbourne Professional digital artist and writer Tim's in-depth knowledge of the intricacies of image editing and Photoshop is second to none



Steve Bavister Photography writer Steve is an industry veteran, having previously run all the top photography publications.

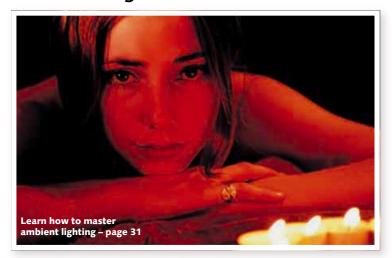


Mark Harris Reviews editor and writer Mark once worked for Which? so what he doesn't know about kit isn't worth knowing.



Photography lecturer, curator, writer Rob has published numerous books and currently lectures on photography in the USA.

Digital Camera Christmas 2004 #28



Contents

Technique

48 Slow shutter speeds

Tricks and techniques to shoot spectacular fireworks.



52 Posing guide

Our posing guide ensures that you take your bestever Christmas shots.



54 How to use a flashgun

How to get the most out of flash.

56 Digital makeover

Change a model's hair colour and make-up, using Elements.



58 Radial light

Create underwater light effects with Elements.



Cover

60 Photoshop layers

In part two of series, we look at Blending modes.

64 Antenna FreeStyle

Turn your pics into an online gallery.

65 Image Converter

Your disc software tutorial.

65 Roxio Toast LE

How to use this fast, effective software-burning software.

66 Managing your files

How to retrieve deleted photos.

68 Photo Q&A

Another batch of your digital problems solved by our experts.

Your pictures

6 Hotshots

This month's best reader photos displayed in all their glory.

140 Your Mission: results

We print your best shots on the theme of 'happiness', the challenge we set you in November's issue.

12 Six of the best

This month we've got the best of your dynamic action shots.

Offers & compos

82 £1,000 of Jessops kit

Everyone's a winner with our Golden ticket competition.

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Photo ideas

78 5 ways: buildings

From churches to towers, follow our simple tips to taking original shots.



140 Your mission: challenge

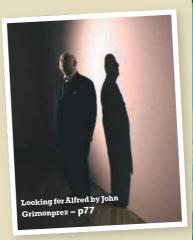
This month, your mission is to shoot the theme of 'greed'.

72 Getup&go

Our must-see photo locations this month are London's Albert bridge, St Michael's Mount and Exeter cathedral.

77 What's on

Your monthly guide to the best photo opportunities.



Features

38 Stephen Hyde

We track down top travel lensman, Stephen Hyde, and discover how digital technology is changing the nature of his photography on the go.

144 The Beauty Mask

We reveal Dr Stephen Marquardt's cutting-edge cosmetic techniques, and how you can use them to take more flattering portrait shots.





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Essentials

- **Eyewitness** Latest photo news
- Viewfinder Best of your letters
- 146 Next month Preview of issue 29
- Competition Win £1,000 of kit
- Subscribe Save money
- Back issues Phone and get one
- 111 Dealer ads Advertiser offers

Kit reviews



New cameras

Sony P150
Canon Powershot S70
Konica Minolta Z3
Casio Exilim EX-S100
Samsung V6



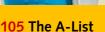
New software

96	Canon Pixma ip500
96	B+W Portrait & Family Set
96	Iridius Actions 1.1
96	Finepix Waterproof Case
96	Exspect Ex210
96 L	exmark P6250 Photo All in One

99 Photo printers on test

We reveal the best of six new models in our exhaustive comparison test.





Buyers' Guide: the 60 best cameras on sale - at their latest street prices.





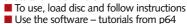
CREATIVE PORTRAITS



Cover 28 Capture the spirit of Christmas. Steve Bavister takes us through classic poses, quick and easy lighting effects, camera settings and more...

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SHOT OF THE MONTH



"This girl was very photogenic and easy to photograph. After taking the shot I lost the $\,$ memory card on the beach – luckily a local found it in the baking sand after two hours of searching!"

Camera used Canon EOS 10D **Settings** 1/60 at f4.5

■ Tim wins a MemoryFrame wireless digital photo frame worth £400, available now from www.2techvisuals.co.uk. Turn to page 10 for details on how you can win next month.



Tim Bird "I'm a keen photographer and have turned a long-time hobby into a part-time job by supplying a major international image library with pictures."



Roger Foster Alicia

"I was 50 feet away with my Canon and 300mm L series lens when I took this picture of my three-year-old granddaughter, $\rm \stackrel{.}{A}licia.$ Very rarely when I capture an image can I say yes, this is exactly what I was after, until this evening and this image."

About Roger "I am a young-at-heart 58-yearold. I now cover all areas of photography, and the passion has never waned.

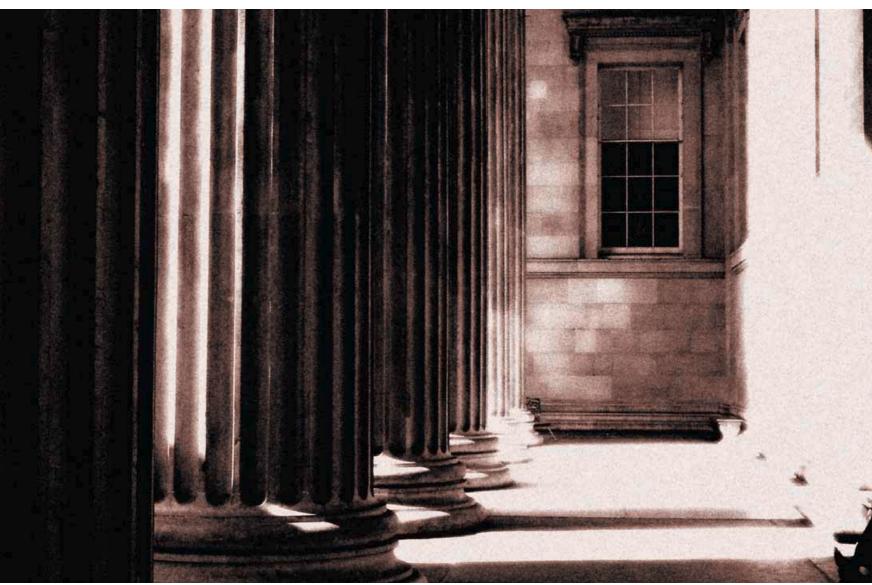
Camera used Canon EOS 300D **Settings** 1/400 sec at f/4.5

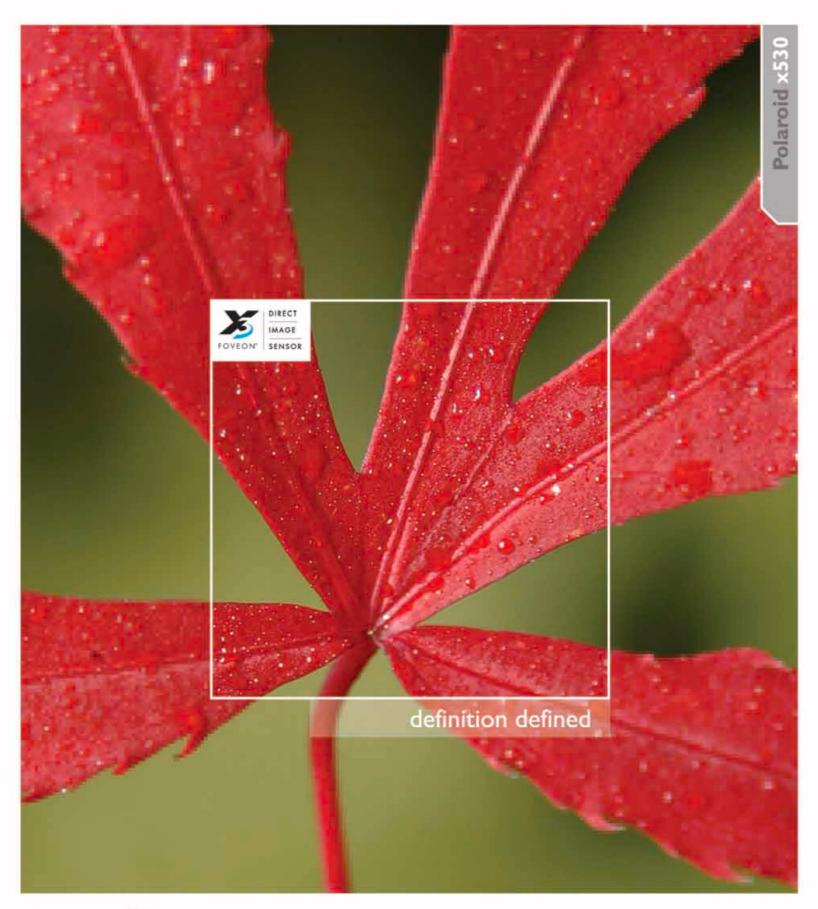
Antonio Acuña British Museum Entrance

"The light was just right, and after taking the colour out, tinting it and adding just enough noise in Photoshop, it came out looking like this: moody and sombre."

About Antonio "I love taking pictures because it's like freezing time, maybe a way of indulging my cinematographic aspirations."

Camera used Kodak DX3900 **Settings** 1/256 sec at f/4.0







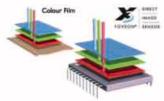
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www.polaroid-digital.com/x530





Hotshots

David TrickeyRed Leaf at Sunrise

"This photo was taken in China this summer in Yangsuo, in the South East. I was up at 4am for a one-hour hike up a peak, then presented with breathtaking views of mist and mountains."

About David "I've always been fascinated by images as communication – a means to break loose from the limits of the spoken word, touching the heart instantly." **Camera used** Nikon Coolpix 700 **Settings** 1/1,250 sec at f/2.8







"I saw this graffiti on one of the London bridges when I was walking along the Thames. The light was very good – I only changed the contrast and brightness in Photoshop."

About Marcin Marcin Kaminski is 27 and from Poland. "I like to photograph a wide variety of subjects. I think anything can make a good image." **Camera used** Sony V1 **Settings** 1/1,250 sec at f/2.8

Gavin Davies Mystical Park

"This is one of the first shots I've taken using my new Hoya R72 infrared filter. It was taken in Chester. I applied Auto Levels and switched the red and blue channels."

About Gavin "It was the immediate results and economy of the digital format that fired my passion for photography."

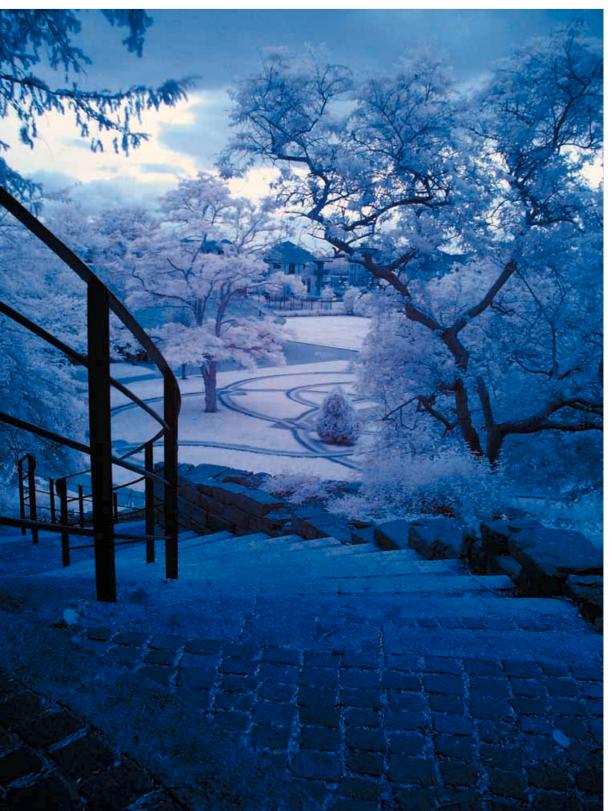
Camera used Minolta DiMAGE 7 Settings 1/16 sec at f/2.8



WIN A MEMORYFRAME!

Send a 500K JPEG of your Hotshot to **gallery. dcm@futurenet.co.uk**. Include your name, the photo's title and the camera used, 80 words about you, and how and why you got the shot.

■ The best wins a MemoryFrame, the best way to admire your favourite photos, kindly donated by 2techvisuals. It's the UK's first wireless digital photo frame and it's available to buy now from 2techvisuals. Phone ☎ 0870 7606676 or visit www.2techvisuals.co.uk for more information.





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TOUCH DOWN! By Bob Smart

Camera Fujifilm F7000. Settings f/4.5, 1/1000 sec. Using sports mode means you can break a fast event down into several consecutive shots. Bob composited three separate shots into one to capture this

✓ Action captured clearly ✓ Clever compositing of shots * Doesn't fill frame enough

ince the dawn of photography, people have realised that a still frame of an action event gives us a unique perspective on the subject matter. Photographic pioneer Eadweard Muybridge wrestled with early camera technology to put an end to the debate over whether all four feet of a galloping horse ever left the ground at the same time.

To get over the problematic slow shutter speeds of the late nineteenth century cameras, Muybridge created a rig of cameras that were triggered in sequence as a horse galloped by. Using this technique he successfully proved that all of the horse's feet did indeed leave the ground at the same time. Like Muybridge, many of you also have a passion for capturing action, as this month's stunning action submissions demonstrate.

There are many ways to approach shooting an action shot. Many compact digital cameras default to a high shutter speed, enabling you to freeze action with no motion blur. This is great for capturing the dust being kicked up by passing rally cars, or spectacular displays of water droplets caused by kids jumping into a pool. Fast shutter speeds enable you to preserve unique moments in time.

You can add a sense of movement to your shots by slowing down the shutter speed and panning to follow your moving subject. This adds motion blur to the background, while keeping your moving subject sharp. As you'll see from this month's Six of the Best, there are many different but effective approaches to shooting action.

Next month Weather



WING WALKERS By Erik Strodl

Camera Canon EOS 10D. Settings f/4.5, 1/500 sec. Despite the high speed, Erik has created a well composed shot. The rear plane adds a sense of depth to the image; the smoke underlines the action's speed.

✓ Great subject matter

✓ Fills entire frame

✓ Crystal clear shot



SURFER By Robert Ware

Camera Canon EOS 10D. Settings f/6.7, 1/500 sec. Rob has captured this surfer with crystal clarity. The angle of the board follows the curve of wave, creating a pleasing line that draws the eye through the shot.

✓ Well cropped in



WHOOSH! By Karen Addison

Camera Canon EOS 10D. Settings f/8, 1/90 sec. By panning with the subject, Karen was able to keep the swan sharp, despite having the camera set on a low shutter speed.

SEND US YOUR SHOTS AND WIN!

The winner will receive a copy of Roxio Creator 7 and a Samsung Writemaster 16x DVD writer! Creator 7 is Roxio's, award-winning, all-in-one, easy-to-use package for CD and DVD burning, plus powerful digital photo and video editing! Create slideshows, copy music, movies and more! To get £20 off Roxio Creator 7 and buy it for £49.99, visit www.roxio.co.uk/digitalcamera

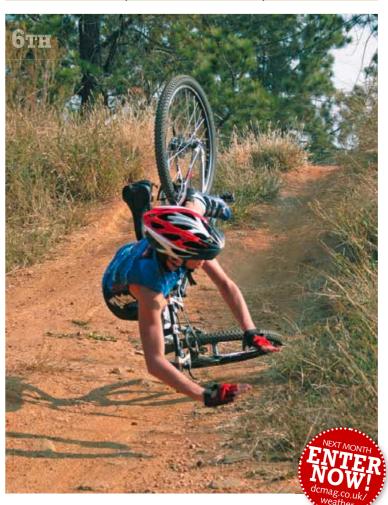


Email your shots to gallery.dcm@futurenet.co.uk



SHOPPING By Grant Chen

Camera Canon EOS Rebel. Settings f/8, 8.0 sec. Using a slow shutter speed, Grant captures action in an everyday scene, demonstrating the camera's ability to collapse several seconds of time into one still image.



OUCH! By John Thomson

Camera Canon EOS 10D. Settings f/6.7, 1/500 sec. Sometimes the camera gives you a unique perspective on an action event. John assures us that the only bruises resulting from this were to the rider's ego!

* Tighter crop needed ✓ Great subject matter ✓ Good technique







PHOTOGRAPHY

DSLRs have shed pounds

Digital SLR photography becomes more affordable for enthusiasts

ikon has slashed £100 off its entry-level D70 digital SLR, bringing the price of the body-only bundle down to £699. Canon, meanwhile, is offering a cash-back deal of £100 on the EOS 300D, bringing the body-only deal in at £680. The cost-cutting moves have been made to capitalise on the 2004 Christmas market and promise to make SLR-based digital capture an affordable reality for photography enthusiasts on amateur budgets.

First Canon

Canon, with the 6.3-megapixel CMOS-equipped 300D, was the first to introduce a sub-£1,000 DSLR with interchangeable lens into the UK. Launched late last summer, the 300D has a reduced feature set compared with pro-style

DSLRs, being built Nikon 70

down to a cost, but its appearance prompted a re-think among camera manufacturers about the potential of the prosumer market. Nikon quickly responded with the 6.1MP D70, offering a better bunch of features in a more rugged-feeling body, although at a higher price.

Canon's cash-back deal runs until 31st January 2005. It applies to the £780 body-only kit; the 300D with EF-S18-55mm f3.5-5.6 (non USM) lens at £850; and the body plus EF 55-200mm f4.5-5.6 UM II lens at £1,090. More details can be found at www.canon.co.uk

Nikon realigns

Nikon's cost-cutter is a permanent 'price realignment' and kicked in at the same time as the Canon offer. The D70 with 28-80mm zoom is now £750, while the body plus 18-70mm DX lens is £890. There's also a voucher offer of £300 in savings

> on selected D70 accessories, including Speedlight flash units, lenses, software and Nikon training courses, for buyers who register their cameras online at www.nikon.co.uk/ d70voucher before 31st December 2004.

The prices given are suggested retail prices, so shop around.



Above and below Nikon's D70 and Canon's 300D are ready to slug it out, both heavily armed with special offers

300D back in black

Those who shy away from silvercoloured cameras can revel in darker pleasures, thanks to the launch of a black-liveried Canon EOS 300D. The Black kit is available exclusively through Jessops and includes an EF 18-55mm f3.5-5.6 USM zoom lens, which is only available in the UK as part of the kit. The price is £890 and the £100 cash-back offer applies, as does the deal on the free 256MB memory card. Canon USA's general manager of consumer imaging, Yukiaki Hashimoto, said: "The new black body will appeal to even more people, with a more professional and fresh new look and easy-to-use advanced functions at an affordable



Outdoorwear

Winter gear

Here's our choice of essential aids for photographers venturing into the wilds this winter



Kimmlite Technical top

This undergarment helps retain warmth and draws moisture away from the body. Deep-neck zip offers ventilation.



Outdoor Designs Powerbalaclava

Cover your noggin in style with this no-compromise balaclava.



■ Bloc Polecat sunglasses

Protect your eyes from sun reflecting off snow. Features polycarbonate lenses that enable you to see the full colour spectrum.



Smartwool liner

These liners are thin, lightweight and increase warmth and cushioning when worn with normal socks.



Petzl Zoom Halogene torch

Shooting in wintry, low-light conditions is hassle enough without having to hold a torch. So put one on your head for hands-free illumination.

Thanks to

Best sellers information supplied by www.dabs.com











Pentax Optio S50 Sensor: 5 megapixels

FREE GIFT

Daft as a brush

Wondering what to use last month's free brush for? Geoff Harris has some suggestions



With its soft and handy shaped bristles, our brush is an essential accessory for the ultimate shaving experience!

2) KIDS FACE PAINTING

Fractious kids fouling up your weekend? Our lens cleaner is perfect for slapping face paint onto children's chops.

3) INSTANT DISGUISE

Scared of bumping into an embarrassing ex at a party? Just found out there's a contract out on you? Whip out the bristles and bingo, a convincing 'tache disguise.

4) APPLYING CHOCOLATE BODY PAINT Our brush is the perfect accessory for plastering your partner in Nutella-type naughtiness.

5) CLEANING SMALL ENGINE PARTS

Liberate your inner grease monkey with this wonderful brush for cleaning carburettors and air filters.

6) CLEANING LPS

Dust spoiling your old Val Doonican LPs? Simply polish your platters with our brush.

7) IMPROMPTU HIP FLASK

Everyone likes a tot of whisky on a chilly day and the removable top is perfect for a surreptitious snifter.

8) SLAPPING ON SLAP

Ladies and panto dames, don't do your make-up by halves - whack on the war paint with our free cover gift.

9) HOLDING PENS

Sick of losing pens and pencils? Mount your biros in the handy bristles or you'll have to sign cheques with a pink felt tip borrowed from the kids...

10) TICKLING

Need to extract information? This camera-friendly tickler will break down the toughest and most taciturn exterior.

Eyesights

Mobile snapper

You shoot, you score



- "18th century replica of Captain Cook's Endeavour, taken on The Clyde, leaving Kilcreggan Pier.'
- David Brennan, from Greenock.

Send us your mobile phone photos and we'll print them! Well, maybe. Email to editor.dcm@futurenet.co.uk

"They look like what we might see if a Star Trek-like transporter could move a body through time and space"

See Viewpoint on page 20

PHOTOGRAPHY

Below A camera, hard drive and printer comprise the Easy Imaging System



Moving images

Olympus aims to obviate the need to lug a laptop

If you're feeling tied to a home-computerbased photo setup, Olympus' Easy Imaging System may be just the travel ticket. Its three components - a camera, hard drive and printer - are designed to be ultra-portable, and stylish besides. They hook up to provide a capture-to-print solution that can be used wherever you will.

At the shooting end, the IR-500 camera has a 2.8x optical zoom sat in front of a 4MP CCD. Output is viewable on a 360-degree rotating 2.5-inch LCD that is claimed to work well even in strong sunlight. After its 17 scene programs have been explored, the camera hooks up to the S-HD-100 40GB hard drive, a device capable of storing 40,000 max-resolution images and offering a variety of file-management functions.

There's more data available from www.olympus.co.uk in the meantime.

iPod goes Photo

Latest version of iPod can now store and display photographic images

■ven with industry analysts predicting 2004 revenues of \$1billion for sales of the iPod

MP3 player, manufacturer Apple is not sitting still. The company's new iPod Photo features the same styling as its musical mate, but can now display colour photographs on a 2-inch, 116,000-pixel colour LCD, and on television or via projector thanks to a

TV Out socket.

A claimed maximum of 250,000 digital images can be accommodated alongside the user's music library and can be scrolled

through via a Click Wheel - itself a feature seen on only the latest music-only iPods. Apple CEO Steve

Jobs enthuses: "Having both your entire photo

and music collections with you wherever you go is the next big thing. Everyone has a digital camera and wants to enjoy and share their growing library of digital photos wherever they are."

While the iPod Photo synchronises with Windows' My Pictures folder, Apple's iPhoto, plus

Adobe Photoshop Elements and Photoshop Album on both

platforms, it's less capable when away from the computer. There's no card slot and a digital camera will not plug straight into it, hence it can't be used as a means of backing up images in the field.

However, if all you need is a portable means of displaying thousands of digital images, the new iPod's extended battery life offers up to five hours of slideshow joy. Available in 40GB (£359) and 60GB (£429) versions, the iPod Photo can be ordered through the Apple Store (www.apple.com/ukstore) or bought at authorised Apple resellers.

Left Listen to MP3s while showing off your pics - Apple's new iPod offers a bimedia experience

Travel photography

Adventure show

Travel buffs should leave a hole in their diaries mid-January to accommodate The Daily Telegraph Adventure Travel & Sports Show at Olympia, London. Open to amateurs and professionals, the show has exhibitions and presentations to inspire and inform visitors about every aspect of travel photography, from destinations to equipment. Subjects such as extreme

photography, wildlife and winter shoots will feature in more than 100 free talks, while more than 250 adventure travel and sports specialists will be on hand to thin your wad.

- The event runs from 14th to 16th January and advance tickets are £8 adult, £6 child and £28 family plus £1.50 P&P
- Call 0870 060 0199 or visit www.adventureshow.co.uk





Left This is the first portrait Sandra took of her granddaughter. She wanted to emphasise the close bond between mother and daughter. The ring adds a splash of colour to the almost monotone effect

andra lives with her husband, two children and granddaughter, Ellie Mae, who has given her umpteen excuses for turning the lounge into a studio!

"I have been into photography for many years now, starting with a Zenith. Although it was an ancient and heavy beast, the Zenith had a super built-in light meter and it taught me how to use light and speeds.

"I love photography for all the different ways you can portray a single scene. One step back or forward, the direction and general use of the light can all make such a difference you can get ten people to take a shot of the same thing and each image would be different!

"I use the Fuji s602 Pro Zoom now and I'm saving for a DSLR. I'd advise anyone starting out to take one camera feature at a time and learn how to use it – it's a great way to really get to know your camera inside out. I always keep mine with me because you never know when that once-in-alifetime shot will present itself.

"I've been involved in the DCM forums for some time now. There's always someone with the answer, and occasionally I've been able to answer another forum member's query!" ■

■ Do you have some recent photos you'd like to show other readers? Email editor.dcm@futurenet.co.uk

STORAGE

Mobile data hits the big screen

Epson's latest data wallet promises big, bright photo previews and plenty of back-up space

Data wallets are becoming ever more capable and Epson's P-2000 Multimedia Storage Viewer aims to take things further with a large, high-resolution display by which to ogle stored images. Its highdensity, 3.8-inch Photo Fine LCD is rated at 212 pixels per inch, which is more than twice the pixel count of competing models.

The device can handle up to 40GB of photo data, including RAW files, and also supports JPEG and MPEG4 movie playback as well as MP3 and ACC audio formats. The P-2000 links to Mac or PC via USB and has built-in support for Compact Flash and SD memory cards for direct data transfer when shooting in the field. Discover more about this £349 photo accessory at www.epson.co.uk

Above The P-2000's Photo Fine display boasts VGA (640 x 480) resolution

Eyespy We know your stuff...

■ Mobile hosting

Korean electronics giant Samsung has narrowed the gap between the capabilities of dedicated stills shooters and phone-cams with a mobile hosting a built-in 5MP camera. The SCH-S250 has CCD-based image sensor, built-in flash and 92MB of onboard memory for highres stills capture, and it also functions as a video camera. The LCD, protected by a Matrixphone-style 'stretch' design, is also pretty handy, with QVGA resolution and 262.000-colour resolution. Text-tospeech conversion, 3D sound effects and MP3 playback will further serve to upset European gadget lovers when they discover that the S250 is only available in Korea, At present, that is,

■ PSP news

Paint Shop Pro has a new owner. Jasc, developer of the budget image-editing package, has been acquired by Corel, the corporation behind WordPerfect. CorelDraw and Corel Painter. The acquisition pumps up Corel's worldwide customer base to 60 million, which is good news for CEO Amish Mehta: "Over the long term, we will significantly expand our footprint with consumers who regularly purchase digital photography

software – a fastgrowing software market segment," he reckons. For existing Jasc customers, product support will continue under the Corel brand

■ 2005 calendar

Leica is offering a taster of top photographers' work in the form of its 2005 wall calendar. Reflecting the 50th anniversary of the Leica Rangefinder system, the calendar is dedicated to availablelight photography by such luminaries as Claude Dityvon, Ralph Gibson and rocker

Bryan Adams. Email info@heel-verlag.de

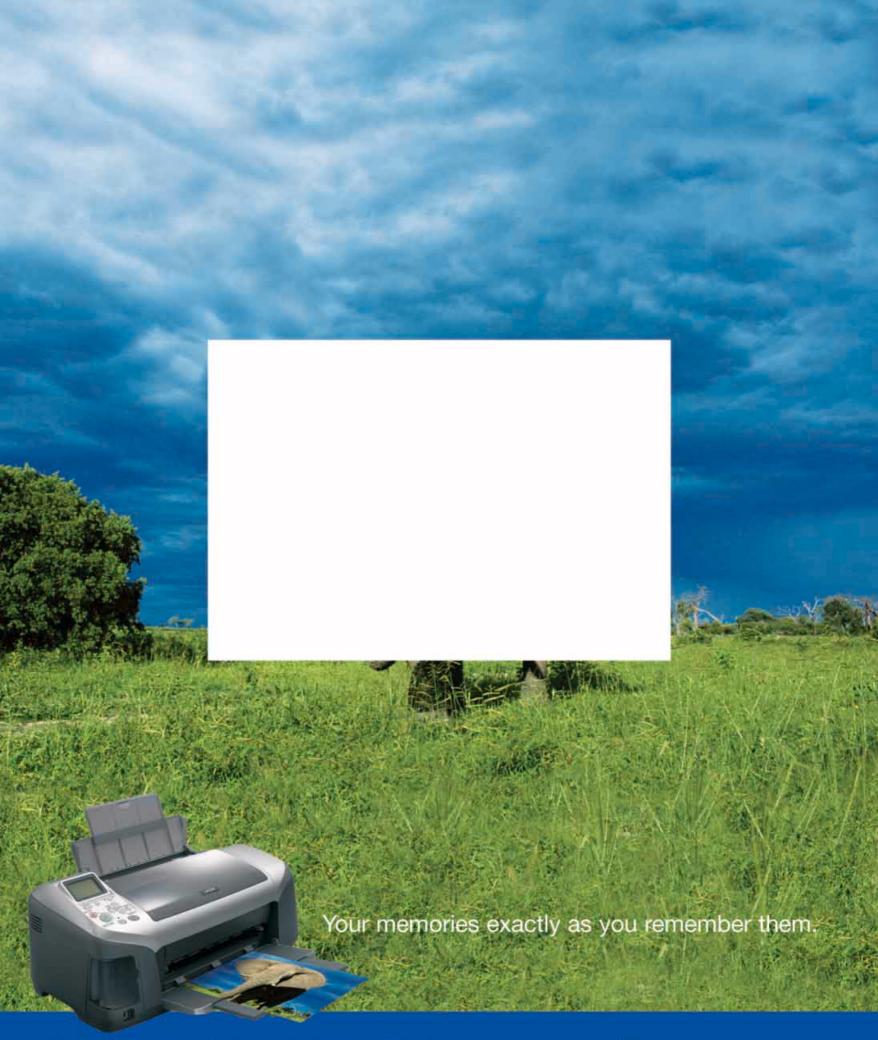
■ Jessops floats

Jessops has floated on the London Stock Exchange. The boom in digital photography has boosted the company's turnover by around 230 per cent in the past six years. "We have had positive feedback on the business and believe investors share our views on the opportunities open to us to capitalise on the high growth in digital photography," said Jessops chief executive Derek Hine

My biggest mistake

A friend of mine is a professional model and I was invited along to a shoot. I took my digital camera to grab a few photos for myself. As the photographer was adjusting the lights, I took a snap, which set off the studio flash... right in the photographer's eyes. Of course, I was asked to leave.

■ Tatyana Romanova, Lithuania ■ Email yours to editor.dcm@futurenet.co.uk



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Viewpoint





Rob Hirsch

You don't need Photoshop to produce fancy effects. This guy

The art of photography

he marketing forces behind digital imaging try to convince us that the latest high-tech equipment is always needed to make first-rate photographs. But consider Christopher Bucklow's Guest series, which utilises a low-tech, large-scale pinhole camera to produce images of silhouetted human bodies, which seem to be formed from tiny points of glowing light. They look like what we might see if a Star Trek-like transporter could move a body through time and space.

Each image results from a tin cut-out that Bucklow pierces with up to 25,000 holes in the shape of his subject. This is placed inside a homemade camera over the photographic paper and then exposed to the sun.

Historic connections can be made between Bucklow's see-through presences and 19th century spirit photographs, which purported to make visual records of persons in a state beyond death. Of course, these ectoplasmic manifestations were really made through double exposure or multiple printing.

And there are similarities between Guest and Ólafur Elíasson's installation, The Weather Project, which dominated the Tate Modern's Turbine Hall last winter. Both projects share a concern for representing the sun and utilising light and colour to explore notions about experience, mediation and symbolism. Recently I asked Christopher Bucklow about his work:

I started making photographs in 1991 after realising that the experience offered by the paintings I was making at the time was not

■ David Allen Mellor (a Blind Spot Book, published How and why did you start making photos? by PowerHouse Books, ISBN 1-57687-235-1, £33.50/\$50.00), is now available. For more information see: www sufficiently intense. chrisbucklow.com



uses nothing more than a pinhole camera, reveals **Rob Hirsch**

What gave you your ideas? **About Rob** Rob is the author of a The figures I depict are people I have dreamt number of books on about. Mondrian's early - pre-abstract photography. He was the paintings were most influential on my Executive Director and Chief Curator of the photography. I also have a passionate interest Center for Exploratory in the psychology and evolutionary function and Perceptual Art in New York. He now of religion. It is probably close to the views teaches the history of held by the English poet William Blake. Was photography. Blake a Christian? He would have said yes, but one that belonged to a sect numbering precisely one. Would the Pope agree that he

him burnt at the stake!

Describe your process of making photographs, how you arrived at it and its relationship to transcending the material limitations of photography.

was a Christian? No – he would have had

My pictures are as low-tech as they come: pinhole photography. But I use more than 25,000 pinhole apertures on my cameras and the plate size can be as large as 40 x 100 inches. I shoot directly onto Cibachrome [Ilfochrome] paper. I only shoot the sun - the paper in the camera becomes the actual work. The thousands of images of the sun's disc are the only photographic part of my process - the silhouette is basically a drawing.

How do you select your subjects and what do they represent to you?

I believe everyone in your dreams represents a psychological aspect of yourself. So the whole Guest group is offered as an extended selfportrait - females and all.

What is the role of 'beauty' in your work?

Beauty thrills me, enthrals me... literally. Therefore it is also deployed as a weapon in the war to cause you to need to look at my work involuntarily.

What does working photography, drawing, painting and video permit you to do, as opposed to sticking with one medium?

Each medium offers another unique range of metaphoric possibilities in my effort to be specific about the subject matter I always explore - always have and always will explore.

Where can people see exhibitions of your work in 2005?

At Hug Gallery in Amsterdam in February and March, at the Huis Marseilles, Amsterdam during the same period, and more generally at the Paul Kasmin Gallery in New York city and the Anthony Wilkinson Gallery in London.



Nikon.

Digital.

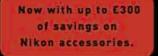
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DCM A very good point, Morgan. The gentleman responsible for all those amazing shots was Laurie Campbell, a professional wildlife photographer from Scotland. Look carefully and you'll see his work in many of our past issues.

MAKING IT UP

Brilliant! Except that I left it lying around, the wife thought I had bought her a new make-up brush and promptly used it to apply blusher. Your gifts obviously

have appeal across several markets!

Robert Selvey

DCM There's only one solution if your camera cleaning brush (given away with issue 27) has been appropriated by your partner: buy a back issue!

TIME FOR AN SLR?

I read with interest your introduction to October's issue of Digital Camera Magazine. The flexibility and convenience of digital photography means I haven't taken my old 35mm SLR out of its case since buying a Pentax Optio Compact 12 months ago. However, it is now time to upgrade to something that gives me more control and - this is important - no shutter lag.

A budget SLR such as the Canon EOS 300D or the Nikon D70 has seemed the obvious choice up until now, however while comparing specifications and prices I stumbled across a preview of the forthcoming Nikon Coolpix 8800. With full control of all camera features and a 10x zoom lens in a compact body, I am now seriously wondering whether I really do need a digital SLR.

Surely a decent optical viewfinder and virtually zero shutter lag means DSLR is the only way to go? Except the Coolpix 8800 has got Vibration Reduction as standard and can even take lens accessories, giving performance from 7mm to 600mm!

Chatroom

Our website forums offer a wide range of topics, advice and tips for newcomers and experienced photographers alike. This month, talk turned to the topical

(phnar phnar – ooh, you are awful) with a tripod and a camera poking out of the window. I live on a hill in South London and have a stunning view, so 5th November is a total firework fest. This year, I read everything I could about how to get good shots and took about 200 in total

However, not a single one was worth keeping! And my knees were sore!! I realise that one of my problems is that I never know where the next flash is going to be, but I am truly in awe of anyone who gets good pictures of these elusive rascals.

Franni Szekely

I have found that when photographing big displays most of the good shots come at the end of the display. If you are in a quiet location you should be able to hear the thud of rockets that give the most impact as they are launched. It is then a case of using a small aperture and long exposure of between five and ten seconds, then after that it's pot luck. You can always cheat and montage all the best bits into one shot! **Keith Morris**

Yes, I think that if I was watching a display I might have managed a couple of good ones. My problem is that I was trying to take shots from approximately Battersea to Canary Wharf and nearly wore out the head of the tripod, flicking hither and yon.

Franni Szekely

a long time and cover the lens with a piece of black card (or your hand). When something good happens, uncover, and repeat for a couple of

www.dcmag.co.uk/forum

subject of taking successful firework shots. Here's an extract... Firework frenzy I spent Friday evening on my knees

The trick is to leave the shutter open for bursts per frame.

James O'Neill

Now it's your turn!

To join this discussion and others like it, head over to our website forums at www.dcmag.co.uk/forum

NAME AND PRAISE

I loved the wildlife supplement in your latest issue - amazing photographs! But you don't say anywhere who took them. Please enlighten us?

■ Morgwn Atkins

STAR LETTER Love that EVF

In your editor's Welcome in issue 25, you said that, personally, you could not stand electronic viewfinders. I couldn't disagree more. Let's say we have two cameras, an SLR with an optical viewfinder and the other with an EVF, where the lenses, sensors and other features are identical. Let's also make it clear we are not talking about the LCD screen on the back of the camera, but the viewfinder that you place your eye directly over.

When you set up a shot using the SLR camera, looking through the viewfinder, you see exactly what the optics of the lens sees. There is still one critical process left out of the equation: that optical image is then presented to the digital sensor which interprets it electronically,

resulting in the final shot. With the SLR camera, you have to trust that the digital interpretation is close to what you see through the lens.

When you set up a shot using the electronic viewfinder, you see exactly what the sensor sees after it interprets the optical image provided by the

lens. So the effect of things such as exposure settings are presented

to you before you snap the picture. To me, it's a no-brainer - if you want to see what you get before you commit to the shot, the electronic viewfinder is the proper choice.

■ Salvatore Contino

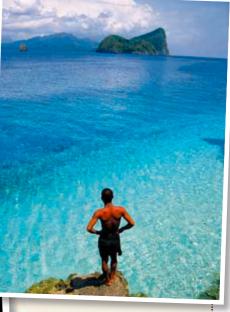
DCM What you say is absolutely true but you miss out the one feature of EVFs that really gets our backs up: they're still too low-resolution for you to see the scene properly. When manufacturers come up with an EVF that is as bright and detailed as an optical viewfinder, we'll be the first to switch over...

Congratulations to Salvatore who wins a 512MB Crucial memory card.



Trailblazers Travel the world, see interesting things, and shoot them





The symphony of lights

"This was taken in March in Hong Kong from the Kowloon side of the harbour.' Tom Pritchard, Isle of Wight Camera Canon EOS 300d **Settings** f/9.5, 1/45sec

High dive

"This was shot with my Canon 400 Ixus in the Philippines Robert W Davis, Philippines Camera Canon Ixus 400 **Settings** f/7.1, 1/400 sec

■ We want your best holiday or travel shots! Send them in and we'll print the best. Email us a 500K JPEG today, at gallery.dcm@futurenet.co.uk

Perhaps you could do a comparison review between top-end compacts and budget digital SLRs, weighing up the pros and cons of each. If you do please can you make sure the DSLRs come out on top, as I really do need a good excuse to go out and buv one...

■ Mark Pitts

DCM The most obvious differences between high-end compacts and digital SLR cameras are the fixed versus interchangeable lenses and optical vs EVF viewfinder, although there are others as I discussed in my Welcome in issue 25. It's a tough decision that really boils down to how you use your camera. Whichever system you go for, we're sure you'll be chuffed with the results.

MOONSHADOW

After reading the letter on astrophotography I thought you might be

took with a Nikon Coolpix 4500 put through a Swarovski 80 scope.

■ Ken Plows

DCM What can we say? Superb!

READY, SETTING, GO

I read Digital Camera Magazine and one thing that disappoints me is that the pictures featured, in most cases, no longer give details of the camera settings used to take them, such as

interested in this picture I

aperture, shutter speed and so on. I'm

sure you used to give out more information like this.

I was hoping to resolve a problem I get when shooting running water by seeing what settings people used in issue 25's Challenge section, where readers were challenged to send in their shots of waterfalls. But, even though some of the pictures featured do give the settings used, these were taken with professional digital cameras.

I have a compact digital camera, a Sony V1, and setting the shutter speed down to give the water the required blurred effect makes the image so bright you can't see anything; even using a polarizing filter makes little difference. The problem is I that the maximum aperture setting you can get on a compact digital is around f4.0, which allows too much light in, whereas professional cameras have smaller apertures to get around this.

Can you help? Is there a way around this problem or am I doing things completely wrong?

■ Steve Evans

DCM Firstly, we like your idea about settings so much that we're going to put them alongside as many photos as possible from now on. Secondly, too much light is always a problem when taking these kinds of pictures. Rather than a polarizing filter, use a neutral density filter to cut all the light down - this will help you get the shots you're after.

NEXT ISSUE!



Shoot your best ever winter landscapes

The end of the year is a great time to take landscapes. You've got a low sun casting raking shadows, misty mornings and wonderful cloud shapes. Capture them all with our complete guide.

High street vs online photo developers Should you pop down the shop or send it over the web? Find out next month!

Learn all about layers Don't miss the third part of our comprehensive series on Photoshop Layers, where we show you how to harness their true power...

Next issue is on sale FORGET! Thursday 30th Dec.

THE GALLERY

This month's gallery is by Chris Edwards at www.portfolios.com/chrisedwards. "I am a freelance photographer based in Northumberland." If you'd like your online gallery to appear here, email editor.dcm@futurenet.co.uk today.



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Epson Stylus Photo RX600: Th





The Epson Stylus Photo RX600 is a virtual photo lab. It's the perfect all-in-one hub for digital users, but also caters for the needs of film photography enthusiasts. It's a complete digital darkroom that comprises an A4 flatbed and 35mm film scanner, together with an A4 printer and copier.

A UNIQUE COMBINATION

Epson has combined a high quality photo printer with a stunning high-resolution flatbed scanner. It comes complete with built-in transparency hood for your negatives and slides – creating an all-in-one device with its own 2.5-inch colour screen that's able to operate as a standalone device or when connected to a PC.

The resultant versatility means it's more than a 'digital-only' machine. The printing and scanning elements provide the basis of a platform that becomes an extremely versatile bridge between 35mm film and digital photography. Equally it can act as a bridge for anyone shooting film who requires the control offered by printing their own negatives or slides without requiring a darkroom or a PC.

Designed specifically with the photographer in mind, the Epson Stylus Photo RX600 provides a unique combination of tools so that no matter what you need to do with your photos, you can produce stunning, vibrant long lasting prints and high quality scans all from a single device for around £199 inc vat.

PRINTING

For the photo enthusiast, the most significant element of the Epson Stylus Photo RX600 is probably its photo-quality printer, which uses six individual ink cartridges for cyan, magenta, yellow, black and its two photo-inks of light cyan and light magenta. Individual ink cartridges mean you only replace the ink that is empty, making it more economical to use.

The printer can output an impressive 5760x1440dpi (dots per inch) providing stunningly detailed, colourful prints. The light cyan and magenta 'photo' inks enable the printing of fine image detail such as the subtlety of white clouds in a landscape shot or realistic rendition of skin tone and texture in portraits. All essential elements for the photo literate and demanding photo enthusiast.

SCANNING

The Epson Stylus Photo RX600's scanner provides the means to scan from originals including prints, negatives or slides of which you can scan up to four mounted or a strip of six unmounted slides or negatives. You can enhance, remove dust and retouch colours as the scan is made, saving hours of work on a PC.

e photo-lab hub for the home.

The Epson Stylus Photo RX600 has a 2400x4800ppi (pixel per inch) scanner using a matrix of pixels that provide the resolution and colour depth (48bit/pixel) for high-quality scans and enlargements of slides or negatives, prints or documents depending on whether you use the flatbed scanner or the built-in transparency scanning hood respectively.

Importantly, a series of 'scan to' functions enable scanning of an original for almost any purpose, including scan to email, fax, web, PDF, PDA, OCR and of course, scan to print. Each scan is optimised for the intended use. A scan to web document will create a smaller file size image for fast upload to the web, while scan to print generates a file big enough to produce beautiful photo quality prints.

And for those prints, negatives or slides that are suffering the ravages of time the Epson Stylus Photo RX600 has built in retouching software called Photo Restoration to repair as it scans: detail can be sharpened, colour can be restored, and for films, even dust can be removed.



The Epson Stylus Photo RX600 can be used as a standalone copier too, enabling up to 400% enlargements. You can also create enlargements of your photos or save a scanned image directly to a memory card on one of the Epson Stylus Photo RX600's card slots.

CONNECTING

Versatility is the key for the Epson Stylus Photo RX600. It can connect to almost any device, from PC to digicam, from mobile camera phone (with Bluetooth™ adapter) to CD burner and directly to memory cards via its multiple memory card slots.

Memory card compatibility is as comprehensive as the rest of the package. It connects with all the popular memory formats currently available: CompactFlash Type I/II including IBM MicroDrives, xD-Picture Cards, SmartMedia, SecureDigital and MultiMediaCards; Sony Memory Stick (including Magic Gate, Duo* and Pro) and Mini SD* and RS-MMC cards*. (*Requires optional adapter.)

Using its built in USB 2.0 High Speed connectivity, the Epson Stylus Photo RX600 can be linked to your PC or, via the front USB port, to a digital camera for USB DIRECT-PRINT or PictBridge direct print functions with compatible cameras. The front USB port also allows connection to compatible CD-R or ZIP drives enabling back up of scanned images or shots on a digicam without an intervening PC.

INDEX SHEET

A neat trick illustrating the Epson Stylus Photo RX600's flexibility and ease of use is index sheet printing of images from, say, a memory card or a digicam. The index sheet has thumbnail versions of each image, which can be marked for automatic printing using a small check box by each thumbnail.

The marked index sheet is scanned, the on-board computer notes those thumbs with marks and starts to print them automatically, without wasting time or paper. The index sheet is also a valuable archiving aid; print an index sheet of all images on a CD and you have an at-a-glance guide to the contents, which can be kept in the CD's jewel case for future reference.

The Epson Stylus Photo RX600 is ideal for photographers requiring high-quality prints and scans; both these elements mixed neatly with the flexibility to restore 35mm negatives or slides, print directly from a scan – on the 'fly', directly from a digital camera or from a memory card and be able to back-up to an external CD-R too... and it does much more besides. For more information visit Epson at www.epson.co.uk



Epson Stylus Photo RX600 works for both analogue and digital photography.







Creative portraits

Family and friends are the most important people in your life. **Steve Bavister** shows how to capture superb images of them

When we think about subjects we'd like to photograph, it's often exotic locations, dramatic action and fascinating wildlife that come to mind. But one of the areas with the greatest potential is closer to home: our family and friends.

In our search to capture the new and unusual, the people who matter the most to us often get forgotten. So in this feature we invite you to train your camera on your nearest and dearest, with lots of tips and techniques to make the most of them.

And with the festive season approaching, and families coming together to celebrate, now's the time to capture some fantastic family portraits.

Composition: group dynamics

When arranging couples and groups, you need to think in terms of shapes

Composing a group to give a pleasing composition is a bit like flower arranging: you need all the elements in just the right place for it to work as a whole. The secret of success is to think in terms of shapes - creating triangles or semi-circles that give the shot a sense of structure.

When organising any group, you need to decide who you want to be the centre of attraction, and place them literally in the middle of the picture, with everyone else around them.

If you were photographing three generations (perhaps grandmother, mother and daughter; or two parents and two children), you would usually put grandmother in the middle, with the others gathered around, with tallest person in the middle at the back.

With big groups, don't have everyone standing because it'll end up looking like a firing squad. Sit one or two people on chairs, have others standing behind, and some kneeling on the floor, making an 'S' or reverse 'S' shape. This is one way you can manage differences in height of various family members.



COMPOSITION

TIDY UP CLUTTER

Nothing ruins a picture like mess around your subject: plates and glasses in the foreground, household items behind. Just before you fire the shutter look around the frame to make sure there's no clutter that



WATCH YOUR BACKGROUND!

Take care with your family shots that you don't make the classic mistake of having something growing out of people's heads. Don't get so focused on your subjects that you don't notice



FACING INWARDS

Each person needs to have their body facing the centre of the group, leaning in slightly, and looking at the camera. Placing people at 45 degrees has the advantage of making them look slimmer. Never have people standing square on to the camera – it emphasises their width and flatters no one.

Young children should generally be given a 'protected' position within the group – on someone's lap – and not at the edge.

"DON'T HAVE EVERYONE STANDING BECAUSE IT'LL END UP LOOKING LIKE A FIRING SQUAD"

With couples you have lots of different options, using standing, sitting and floor positions. Have them facing each other. Put one person behind the other. Get one to lie face down, and the other to lean over them. In all your group pictures, pay close attention to hands and feet, which can often look awkward and spoil a shot. Feet should be gently pointed and hands on hips, not hanging alongside the body.

Formal shots

Composition is easiest when you take a formal approach to your family photos. You can place each person where you want, and make as many adjustments as are needed to make everything look just right, as long as you don't tax people's patience by taking

The more practice you have arranging groups, the quicker you'll be able to do it. After a while it will become second nature, and you'll see at a glance what needs adjusting - that someone needs to angle his or her head, someone else needs to lean in slightly there, and so on.

Informal shots

Not every picture needs to be carefully planned. An informal approach can also pay dividends. Why not try some wacky and dynamic compositions, perhaps with everyone lying in the floor with the heads fanned out from the centre, and you shooting from above? Or get everyone racing around, and use a fast shutter speed to freeze the movement.

A third option is to shoot candids, where your subjects don't even know you're taking the picture. You wait until they're involved in a conversation or some activity, and then just fire away. The advantage of this approach is that everyone is more relaxed and natural. The downside is that groupings often leave something to be desired compositionally.





Indoor lighting

Window light, ambient illumination and flash...

There are lots of advantages to shooting indoors: it's warm and cosy, you're not dependent on the weather, and you've got a choice of lighting. The most obvious is to use the illumination that floods in through windows and doors. The light is natural looking and you don't need to adjust the white balance settings.

Generally with groups you'll want everyone facing the light, so the window or door is behind you. While you can place individuals sideways onto the light to produce a more contrasty image, you'll find if you try to do that with groups, the people nearest to the window will cast shadows onto those farther away.

A large patio door or bay window works best because the light is soft and even. If the sun is shining directly in, fitting a net curtain will make it more diffuse. Even on a bright day, light levels can be surprisingly low, and there's a constant risk of camerashake, so keep an eye on your speeds. With a standard zoom you'll need at least 1/125sec to be safe.

Cloudy weather

When it's overcast outside this might necessitate increasing the ISO rating - to ISO 400 or even 800 - with consequent loss of quality. It's better to use a tripod, which has the added benefit of being able to set a small aperture to maximise depth of field.

Even the cheapest digital compact has a gun of modest power built in, sufficient for most domestic environments, while SLRs can be connected to units that have enough oomph to blast across a large hall. Flash has a number of advantages: it's instantly available, the white balance is good, and it lights subjects evenly.

RIGHT &





INDOOR FLASH Be careful when using flash, especially built-in flashguns which aren't always that sophisticated. If you go too close you can all end with burnt-out detail. And it's impossible to correct the problem with your image editor. So pull back To fill the frame use a large feet. the frame, use a longer focal length lens or setting

A MATTER OF BALANCE

How to avoid strange colour casts

Shots under normal room light can come out orange; shots under fluorescent light can look green. That's because the colour balance of such light sources isn't standard. Even on a cloudy day your pictures can end up blue. Happily, most digital cameras have a white balance facility that enables you to compensate for these different types of lighting.







Fluorescent

Tungsten

Overcast light

Results, though, can be unpredictable. Sometimes it's not powerful enough, with the image too dark; and sometimes it's too powerful, with faces burnt out and over-exposed. You can also suffer from the dreaded red-eye and ugly shadows behind your group. That means it needs to be used carefully.

As a rule of thumb, don't get closer than 1.5m and ideally 2m from your subjects. The closer you are, the lower the ISO setting you'll need - and as the distance increases so you'll have to raise it. But avoid settings above ISO 400 if you can, as you'll compromise the quality of your images in terms of noise and grain. Whenever possible, move closer instead.

The issue of red-eye is best tackled by using the red-eye reduction facility found on most cameras these days. This emits a series of small pre-flashes which helps close down the pupil, preventing the light from reflecting back off the blood sockets at the back of the eye. Another problem you may have to contend with when you're shooting indoors and light levels are low is focusing. Some cameras struggle, and you might need to switch on room lights or switch to manual focusing to cope.

Outdoor lighting

The many moods of daylight give you a rich palette for your family portraits

Nothing beats the great outdoors when it comes to taking better family photos - providing the weather's nice and there's plenty of light.

However, that doesn't necessarily mean shooting when the sun is shining. In fact, a bright day with no clouds in the sky can spell trouble when it comes to getting flattering results. Because you have a strong point source of light, the light is extremely contrasty (particularly in the middle of day, when the sun is at its highest), producing dark, ugly shadows under the eyes, nose and chin.

You can reduce them by placing a large white sheet on the ground to bounce light back up, or use fill-in flash. But, overall, it's best to wait until much later in the day, when the sun is lower and the light has softened, or get out early before it's risen too high. At such times the light is also much warmer, giving everyone a healthy looking suntan.

Placing the sun behind you will make sure that everyone is illuminated, but can result in people squinting if it's very bright. If that's proving a problem, put the sun behind them, so you're shooting towards the light. They'll still be evenly lit but they will

"IT'S BEST TO WAIT UNTIL MUCH LATER IN THE DAY, WHEN THE SUN IS LOWER AND THE LIGHT"

be able to open their eyes wider. In contre-jour situations like this there's a constant danger of under-exposure, so do a test shot, and increase exposure by one or two stops if necessary. Unless you absolutely have to take your pictures when the sun is a solitary golden ball in the sky, it's better to wait until some clouds accompany it.

Perfect conditions

Overall, the best outdoor lighting for portraits is when there are wispy clouds moving across the sun. This situation gives a flattering, hazy light that's similar to the illumination produced by the large softboxes used in the studio by fashion and beauty photographers.

Because the shadows are softer, you have more choice about how to arrange the group. It's not essential to have people facing



mply holding a gold or silver reflector at waist level will reflect back enough light to give a serious improvement to cture quality. Gold gives a warmer light than silver

the sun – you can place them at an angle to it, which gives more modelling to their features and brings out the texture of their clothes. Normally you can rely upon your camera's meter with this kind of light and composition.

Soft light

Hazy sunlight can be a good time to shoot towards the light. Because contrast levels aren't so great, your subjects will have a lovely glow around the hair, but you'll still be able to maintain detail in the faces if you increase exposure slightly.

When you're out shooting and the cloud cover is heavier and there's little or no shadow at all, it can be surprisingly good for portraiture. This is particularly true when you're photographing older folk with a few wrinkles, which tend to be highlighted when they're shot in harsh light. However, eyes can look dead when the sun is obscured by clouds - a great little tip is to put a blip of fill-in flash or use a strategically placed reflector to throw a catchlight that will bring them to life.

UNDERSTANDING FLASH GUIDE NUMBERS

All flashguns have a limited range, which depends mainly upon the output of the flash tube, the ISO setting and the aperture set on the lens - though other factors such as whether you are shooting indoors or out also play a part. The power of a flashgun is given as a Guide Number, in meters, at a particular ISO – typically ISO 100. The Guide Number isn't the range the flash will cover. To establish that you need to divide it by the aperture. However, most flashguns these days are automatic, and all you need to be aware of is the range the gun will reach at various settings

ISO	50	100	200	400	800	1,600	3,200
8	1	1.4	2	2.8	4	5.6	8
10	1.3	1.8	2.6	3.6	5.2	7.2	10.4
12	1.5	2.2	3.1	4.4	6.2	8.8	12.4
15	1.9	2.7	3.8	5.4	7.6	10.8	15.2
18	2.2	3.2	4.5	6.4	9	12.8	18.1
20	2.5	3.6	5	7.2	10	14.4	20
24	3	4.3	6	8.6	12	17.2	24
28	3.5	5	7	10	13.9	20	27.8
32	4.1	5.8	8.2	11.6	16.4	23.2	32.7
40	5.1	7.2	10.2	14.4	20.3	28.8	40.6
48	6.1	8.6	12.2	17.2	24.3	34.4	48.5
60	7.6	10.7	15.1	21.4	30.2	42.8	60.4
72	9.1	12.8	18.1	25.6	36.2	51.2	72.2
90	11.3	16	22.7	32	45	64	90

* All figures are the maximum flash range in meters, and assume the use of an f/5.6 aperture



Location, location!

Head off to find more interesting places to shoot – and dress accordingly

Unless you live in a mansion with an enormous estate, you'll be limited in terms of locations in and around your house – and soon your pictures will become boring and predictable.

So ring the changes by heading off somewhere more photogenic.

Depending on where you live, there might be places within walking distance. If not, why not bundle everyone into the car and head off into the great unknown?

The kinds of locations worth considering include parks and gardens, stately homes, mountain scenes, beaches and possibly even funfairs. Be imaginative.

And don't just use the location as a backdrop. Make it an integral part of the photo. Put everyone on a carousel and shoot it with a long shutter speed as it goes round. Or have them all jumping on sand castles at the beach.

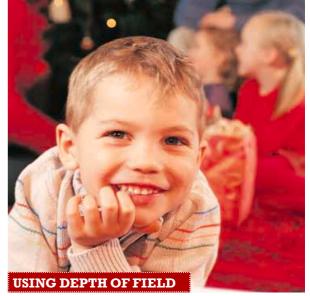
Think about using props and accessories to

add interest. These might be possessions, hobby-related or just introduced at random. You might have the whole family gathered round a cherished vehicle – or even polishing it. Or if everyone plays golf, get them in their Pringle jumpers on a green with clubs in their hands. Clothes are also really important in creating a mood, so don't leave it to chance. Talk beforehand about the effect you're after, so all concerned can dress accordingly.



Creative portraits







Personal expression

If you want to get the best from your subjects, you need to engage with them

Many successful portrait photographers are naturally outgoing and extrovert. They connect quickly and easily with people and can chat effortlessly about a wide range of subjects. If you possess that kind of personality you'll have no difficulty getting what you want from your subjects. Everyone will be relaxed and having fun, and that will show in the finished picture.

That doesn't mean you won't get good results if you're quieter and more reserved. It's just that your approach to establishing and building rapport will be different. Maybe you'll ask your subjects about their interests, and get them talking about what's important to them.

What is crucial is that you act confident. Nothing is more likely to unsettle a group than someone who seems uncertain about how to operate their equipment or what to do next. So start with a clear plan of campaign: what your first three poses are, how you're going to light the photo, and what your lens and exposure settings will be. Professional portrait photographers know only too well that expressions sell - that if people don't look happy and relaxed in pictures they won't buy them, however good they might be in other ways.

Smile please?

How do you get attractive facial expressions? Certainly not by asking people to smile: you'll end up with cheesy grins and fixed grimaces. When a smile is genuine you can see it in the eyes as well as the mouth. So what you have to do is elicit in people a state where they want to smile. That could be by acting the fool or getting people to shout out something that makes them chuckle, such as 'knickers' or 'payday'.

That's also a good way of making sure everyone is looking at the camera with their eyes open at the same time - rather than staring off to the side or blinking. With really large groups, or when you're far away - such as shooting out of a second floor window down onto a group below - it's really useful to have a referee's whistle, which grabs everyone's attention immediately.

One complication, when you're trying to capture those elusive expressions, is the shutter lag on many digital cameras. The picture can actually be taken as much as a second after you press the release. All you can do is learn what the delay will be, and shoot just as you get them to shout.

The biggest challenge is when your subjects are camera shy, cheeky, bored and deliberately uncooperative - or, worse, drunk and bolshy. That's when all you have is your people skills to fall back on. You need to find some way of engaging the everyone's interest, and keep the shoot as brief as possible.

ESSENTIAL EQUIPMENT

If you're planning to develop your portrait photography, you need to get yourself the right accessories...



Which lens A wide-to-shortyou to frame ouples and group



Off-camera flash More flattering than on-camera flash with the option of uncing light



Flash diffusers & backgrounds Fit over the flash tube, producing a softer, more attractive light. Achieve professional looking with results by adding your own background



The simplest, easiest way of improving your lighting quality with small groups



Props to distract babies & kids You need to keep children amused for the



Special occasions Weddings, parties, christenings and other special

occasions are the times when cameras are most widely used – but don't just go into snapshot mode

When people look back over the pictures they've taken, it's often the parties they've photographed that provoke the most hilarity, as people let their hair down and have a good time.

Generally you won't have much control over lighting. It may be an office party, in a pub or at someone's house, and you'll have to use flash. But if your camera allows it, set a longer shutter speed, so you record some of the ambient light as well.

What you want is a sense of something happening, so get people to act up for the camera, which shouldn't be a problem if they've had a few drinks! Get couples and groups in close together, and shoot from four to six feet away, to minimise the risk of flash over-exposure.

It's a similar tale with birthday parties, especially where kids are concerned. You need good anticipation and fast reflexes to capture the action as it reaches it peak.

Of course, not all parties are fast and frantic. A New Year's Eve meal is likely to be more sedate, giving you the opportunity to arrange groups and produce some better quality images.

Christmas cheer

Another classic time to give your camera a serious workout is at Christmas, and there are a number of must-take images – but not just on the day itself. If you have children, you'll probably want to record a variety of key events coming up to the 25th. That way you can tell a story with a sequence of shots, such as buying the tree, decorating it, adding the fairy, and putting presents underneath it.

Then, on Christmas day itself, you can photograph the presents being opened, with the tree as a backdrop. A long to medium shutter speed combined with a burst of fill-in flash will make sure the atmosphere is preserved and the everyone is fully lit. Don't spoil the fun by making the pictures too formal, but do tidy up if there's too much clutter.

The same is true when you photograph things likes the carving the turkey. By thinking ahead, you should be able to quickly arrange a group round the steaming bird, and another as people sit down to eat, without it seeing the pictures are more important than the occasion.

In the afternoon and evening there'll often be lots of opportunity to capture candids, such as people dozing off in front of the Queen's speech or playing with their presents.

These days you have to make the most of such occasions. People move around much more than they used to, and it's not unusual to have family members living at various corners of the UK or even abroad



EY POINTS

THINK IN SHAPES

When composing a group photograph, start with the most important person in the middle and build a shape around

Avoid straight lines, such as having all the eyes at the same level or arms handing down by the body. Create triangles for a dynamic image.

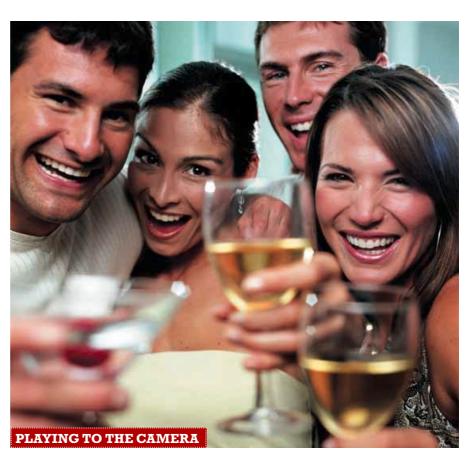
Clear furniture out of the way and use the floor – it's much easier producing an interesting grouping than having

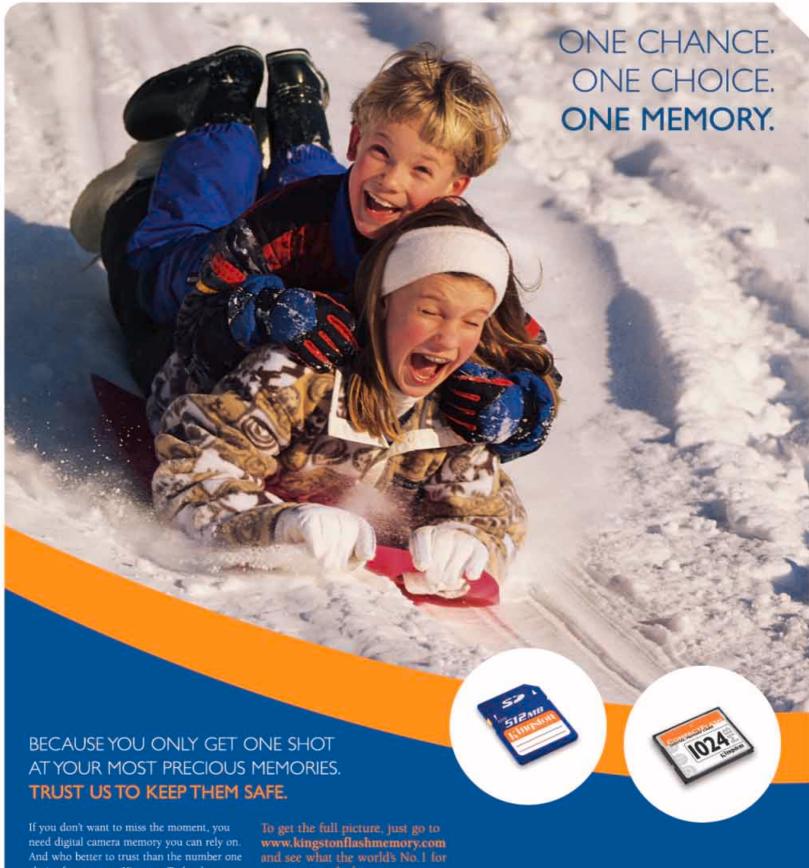


Weddings, christenings, engagements, anniversaries and parties are all times when many people come together. For professional results, why not set up a proper fabric/paper portrait background system? Available from many photo stores for less than £100, there is a wide range of colours available. Or, if you don't have the budget, you can improvise a set-up with a clean well-ironed sheet and a curtain pole.

The secret of taking better pictures of your family and friends is to see the familiar with fresh eyes - and follow the tried and tested techniques we've described here... ■

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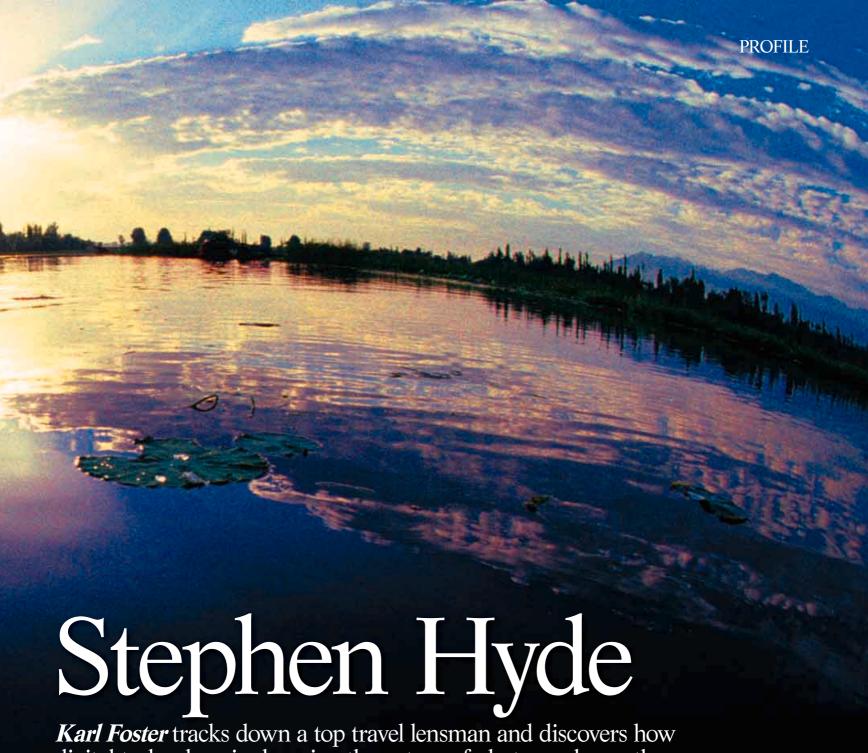












digital technology is changing the nature of photography on the go

or some, photography is in the genes. In the case of travel photographer Stephen Hyde, it can be traced to his great-grandfather, the influential Victorian photographer P H Emerson. While Emerson concentrated on prints of natural subjects, Steve has embraced digital technology.

"Having never even touched a mouse in 1998, I could nevertheless see the inevitability of digital and decided I wanted to be at the forefront of the revolution," he reveals. "I was scared to death of being the old git still. using film while all the young Turks were out there shooting digitally.'

Steve is enthusiastic about the latest technology. Top of his gadget list is a Pocketwizard (www.pocketwizard. com), a wireless device that can set

STEPHEN HYDE



Stephen was born in Nottinghamshire, but moved to London where he

gained a BA Honours degree in modern history. He took up photography in order to "avoid getting a proper job" and began building a portfolio of portraits of well-known authors and playwrights. This got him noticed by various magazines and colour supplements, as well as securing him a National Portrait Gallery exhibition titled Twenty for Today. He has done corporate photography for clients such as the BBC, BP, Texaco and Ford, although his current speciality is travel. See Stephen's work at www. londonphotography.co.uk

off flash units at a distance without the need for sync cables. "Nikon has incorporated the technology in the D2X and SB800 flash units, but I would like to see an industry standard so that cameras can remotely set off any other make of flash," he says. There are other technology issues he would like to see addressed, not least of which is speed. "For me, the main thing is faster writing of RAW files." All this high tech has certainly

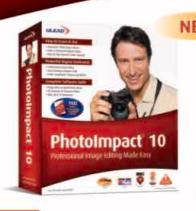
changed the nature of a travel photographer's job. Steve reckons the luxury of knowing he has got the shot, and being able to take more variations at no extra cost, count for much. But, even though he's armed with digital capture, the work still poses numerous challenges. "The main problems involve getting close to the

people without destroying the elusive nature of what you want to capture.

The environments in which he finds himself also deserve special consideration, he comments, citing one particularly scary bus route from Leh in Ladakh to Srinagar, Kashmir: "The mountain valley is strewn with crashed vehicles," he recalls. "One summer 150 people died when the snows came early - the pass is only open from May to August – they got snowed in and froze to death." He is, nevertheless, very impressed with the scenery and culture of Kashmir, although it's too dangerous to travel there at present. "It combines the natural beauty of the foothills of the Himalayas, the exquisite lakes of Srinagar and a way of life which is thousands of years old, yet tempered by the English influence of the Raj.



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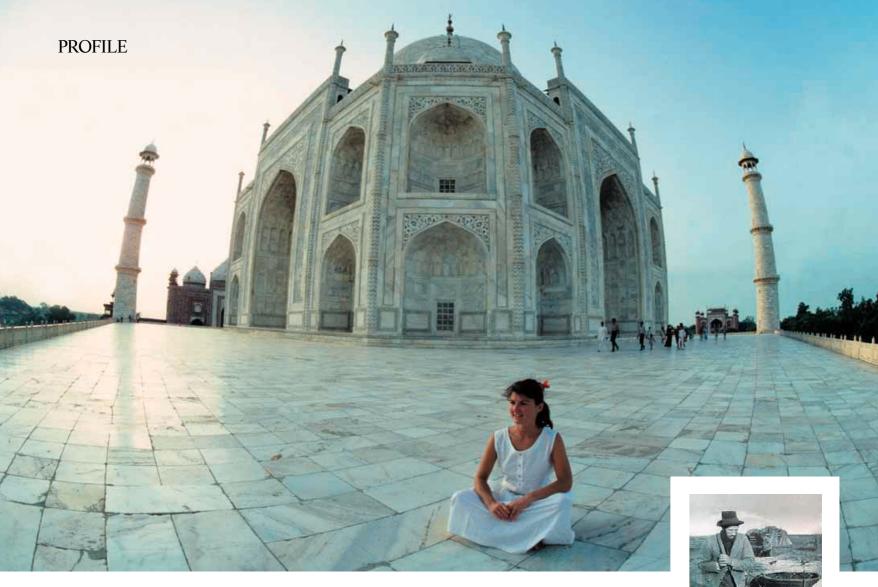
Post-capture processing is the job of a dual-processor 2GHz Apple Mac, iView Media Pro imagemanagement software, Extensis pxl SmartScale for interpolating and, of course, Photoshop. "All images are colour-corrected and tagged with ICC profiles, usually the Adobe 1998RGB profile. The state-of-the-art Apple 23-inch monitor, regularly profiled using the Gretag Macbeth EyeOne calibrator, ensures that we only supply with totally colour-accurate images."

Steve advises that it's of prime importance to get to know the histogram function both on the camera and in Photoshop. It shows the spread of pixels from dark to light, and is an instant means of

Above A shot of a shepherd, grabbed during a bus ride down a Kashmiri mountain pass

Right A 50mm lens was used to capture the children of Ladakh, playing cricket, high up in the Himalayas just near the Chinese border

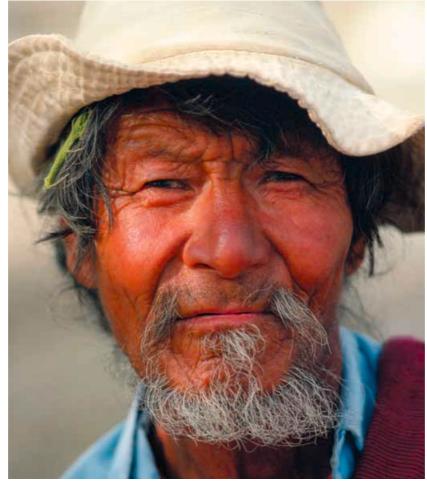




"I HAVE CERTAINLY **TAKEN EXECRABLE PHOTOGRAPHS** - STILL DO. BUT YOU **WON'T FIND ANY** TRACE OF THEM"

telling whether or not the exposure is correct. If not: "Dump your bad shots," says Steve. "I have certainly taken execrable photographs - still do. But you won't find any trace of them the next day." He also advises: "Use a tripod only when absolutely necessary. It stunts creative thinking by suggesting a standard way or height at which to shoot."

In his quest for eye-catching images, Steve adheres to the old maxim 'learn the rules, then break them all'. "There is nothing more boring than a perfectly exposed, perfectly framed photograph. Take advantage of the zero cost of digital to experiment." Such sagacity has no doubt been brought to bear on his most recent assignment, a brochure shoot on the privately owned island of Fregate in the Seychelles. But Stephen has his eye on another significant destination: "Further down the line, China beckons," he tells us. ■



P H EMERSON

Stephen's great-grandfather, Dr Peter Henry Emerson (1856-1936), was an American who moved to England and took part in a debate about whether photography is an art form. "I think he was a slightly overself-important humbug who took himself too seriously, but his work does carry integrity and deserves the recognition it has gained," says Stephen. The critic John Ruskin wrote to him: "If you will condescend yourself to learn to write beautifully and to engrave clearly, you will soon cease to indulge in the arts of idleness."



DUNCAN SOAR

The people-photography specialist reveals his secrets of capturing character

Above A shot of Stephen's wife Amanda, taken with a 16m wide-angle lens at the Taj Mahal, India

Left A 135mm lens was used to capture this image of a fisherman cheers!
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48 SLOW SHUTTER EFFECTS

Shoot spectacular fireworks this New Year

52 PHOTO FUNDAMENTALS How to pose group portraits

54 FLASHGUN TECHNIQUES

Bounce and swivel with the best of them

56 PHOTOSHOP ELEMENTS Give your model a digital makeover

58 DARKROOM BASICS Add light shafts to underwater shots

59 DARKROOM CREATIVE

Create a realistic rainbow effect

60 PHOTOSHOP LAYERS

Blending modes and other layer features **64 YOUR DISC SOFTWARE**

More great programs for you to enjoy

66 MISSION POSSIBLE

How to retrieve a deleted photo

68 PHOTO Q&A

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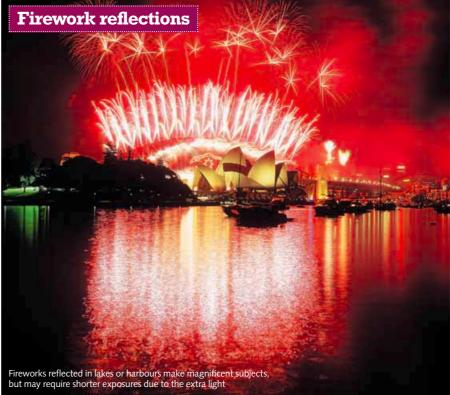
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Out with the old and in with the new! As we hurtle towards New Year's Eve, celebratory firework displays in every town and city across the globe are set to provide

us with a shower of breathtaking photo opportunities. But before we raise a toast to 2005, don't forget there will be many firework displays accompanying this year's Christmas light switch-ons.

Once you've recovered from the festivities you'll have your work cut out keeping up with the pyrotechnics crews in 2005 as they serve up a veritable feast of outdoor shows throughout the year. There'll be Chinese New Year celebrations in February, summer music concerts, pre-match entertainments at sports events, festivals, opening night celebrations, weddings, private parties, corporate entertainments, America's 4th of July celebrations, fundraising events, military displays, bonfire night and Diwali (the Hindu Festival of Light).

Although finding fireworks is relatively easy, they're a challenging subject to photograph and you must be well prepared to make the most of them. The primary requirement for capturing fireworks is a long exposure. The reason for this is two-fold. Firstly, fireworks physically take time to shoot up into the sky, explode and then fade away. Secondly, our eyes perceive these nocturnal displays to be

"Don't tighten your tripod screws so tightly that you can't quickly and easily finetune your framing"

much brighter than they appear to the sensor of a digital camera. Fireworks therefore require far greater exposures than the average daytime scene.

So if you want to successfully capture fireworks you need a camera that enables you to set long exposures of anywhere between about two and 30 seconds. This can be achieved via the semi-automatic shutter priority mode on many compacts, but ideally you need a camera that offers both total manual exposure control and a Bulb (b) shutter speed setting. The Bulb setting not only enables you to shoot extremely long exposures, well in excess of preset shutter speed limits, but it also lets you control the exact duration of the exposure yourself.

Essential gear

Aside from the need for slow shutter speeds, there's no point in attempting to shoot fireworks without a sturdy tripod. Trying to avoid camera shake during such long exposures is a waste of time with a monopod or bracing positions. A decent pan-and-tilt tripod head is an invaluable aid for positioning your lens at awkward angles towards the sky. But a tripod alone won't cut it - you also need a mechanical or electronic cable release with a lock for long exposures.

Technique Photo

Several digicams offer shutter control via a tiny infrared remote control. Without one of these devices you'll have to hold your finger down on the shutter button for the entire exposure, which will inevitably cause camera shake. It's also damn inconvenient!

The next prerequisite is a decent zoom. The exact focal length you choose depends on the type of photos you intend to take, but bear in mind that because of the relatively short duration of most displays, you probably won't have time to switch lenses more than once. If you plan to include any major foreground elements in your composition, a 17-35mm lens is ideal. For a general view with some flexibility to frame your bursts a bit tighter, your best bet is a 28-80mm lens. If you prefer to concentrate on frame-filling close-ups, go for a 70-300mm telephoto. The telephoto option is probably the trickiest because you need to be far more swift and precise with

Two other items that will come in handy are a small torch, and a stopwatch for timing the duration of your exposures and the firework display.



and/or too narrow an aperture and your fireworks won't record properly

EXPERT TIP

AVOIDING UNDEREXPOSURE

Use too short an exposure

Wide-angle shots Wide-angle views require longer exposures than full-fram bursts because light levels are considerably lower

"Using a wide aperture during long exposures is likely to burn out the colours and turn black skies grey"

Do your homework!

It's well worth making a visit to the show grounds a few hours before the display begins. If you're lucky this will give you the chance to meet the pyrotechnics crew as they are setting up. They should be able to tell you in which direction the fireworks will be fired, how high they'll go, the exact length of the display and when the crescendo is due to begin. They may also be willing to reveal more intricate details about the pacing of the show (larger displays are often choreographed to music), and where you're likely to get the hest views

This is also the ideal time to work out precisely where you're going to set up your tripod. Turning up five minutes before the show starts and hoping to fight your way to the perfect spot through crowds of jostling families is a recipe for failure. Instead, jump into a car and scout around the area to ascertain which is the best, most original vantage point.

While you're exploring, consider how you might incorporate an identifiable foreground subject such as illuminated buildings or monuments, trees, bridges, city skylines or even silhouettes of people. This can add a vital sense, not only of perspective and scale, but also time and place. Fireworks reflected in lakes or harbours can create doubly dazzling spectacles of light and colour.

Look for a secluded, unobstructed spot, well away from street lamps and other bright lights that will otherwise turn into hideously overexposed white blotches. If you can't find a secluded spot, then try to find a wall or car to protect you from people who will unwittingly kick and trip over your tripod legs or plant their heads in front of your lens.

Bringing a group of friends along is another great way to shield your camera from crowds of merry revellers. It's a good idea to have someone keep an eye on your gear, too, so that you can concentrate fully on your photography. If you can, also position yourself upwind to avoid smoke passing into your frame and irritating your eyes.

When setting up your camera, direct your lens towards the portion of the sky where you predict that the fireworks will burst, but don't tighten your tripod screws so tightly that you can't quickly and easily fine-tune your framing when the display begins. The majority of fireworks shoot directly upwards into the sky and aren't terribly broad, so we'd strongly recommend shooting in portrait format to begin with.









"With cumulative bursts, expect exposure times of between eight and 30 seconds"

Although you are shooting at night, switch your flash off and choose the slowest possible ISO. This will help to maximise the amount of detail you capture, preserve the vibrant colours, reduce noise and help enable a longer exposure. A small aperture is also best - wide apertures are likely to burn out colours and turn black skies grey. The added advantage of using a small aperture is you maximise depth of field. If you are shooting at ISO 50, start by presetting your aperture to f8 or f11, at ISO 100 try f11 or 16 and at ISO 200 try f14, f16 or f22.

Focusing your lens in advance at infinity is tempting, but it may result in all your fireworks being slightly out of focus. The best way to guarantee pin-sharp shots is to wait until the first burst explodes, focus on that and keep the focus locked for the duration of the shoot. Although most autofocus systems struggle in low light, there should be enough contrast between the fireworks and the sky to enable your system to lock on target. If not, try focusing manually.

Because noise interference is amplified with long exposures and dark subjects, shoot in best quality JPEG or better still in RAW mode to avoid further deterioration from artefacts. Another crucial thing to watch is slow buffers. With the Nikon D70, for example, with extended exposures it takes about the same duration as the exposure to process a best quality JPEG. If your camera does this, it not only means that you'll miss crucial shots throughout the show, but that you'll only get one or two photo opportunities

EXPERT TIP

AVOIDING OVEREXPOSURE

Get carried away with too many bursts in one frame and you risk overexposure, particularly with brilliant white fireworks like these.



during the grande finale. We strongly advise that you test your camera's processing speeds for long exposures beforehand to avoid disappointment. Also beware that the longer the exposure and the colder the weather the faster your batteries will drain.

A question of timing

The final exposure setting to consider is shutter speed, but selecting the optimum capture speeds for fireworks is far from an exact science. The first quandary is that fireworks can take anywhere between about one and ten seconds to run their course. Wideangle views also require longer exposures than full-framed bursts because light levels are considerably lower. In addition, the shutter speed you require depends on whether you wish to capture single or multiple bursts.

For these reasons your best bet is to start with a good estimate and check the result of each exposure in your LCD. You can then fine-tune the shutter speed and aperture as you go. For example, for a mid-range shot of a single burst, six seconds at f16 and ISO 200 is a good place to start. Listen out for the sound of the shell being launched and then open your shutter, watch the entire explosion and only close the shutter when all the sparkles have vanished.

To capture multiple bursts the procedure is the same, but this time, gently hold a piece of black velvet, black felt or matte black card over your lens in-between bursts. Two to four bursts should do it - any more than that and the frame will look messy and overcrowded. You're also in grave danger of overexposure, particularly with brighter fireworks. With cumulative bursts you're looking at exposure times of between about eight and 30 seconds.

The final piece of advice we can offer is don't be afraid to make mistakes - just experiment and have fun!

The fundamentals of...

Posing group portraits Our guide guarantees you your best ever Christmas shots, says Nick Merritt



It's Christmas and at some point that family portrait is going to be asked for. Cue

lots of grimacing, looking at shoes and avoidance of eye contact. But there's good news.

A tiny amount of planning and thinking will turn those indifferent group shots into photographs that everyone within them will be proud of.

There are three useful rules when taking group portraits: fill the frame, avoid gaps and use simple compositional shapes. What does this all mean?

Filling the frame means zoom in close to the group. Don't photograph the background. Leave out the Christmas tree. And don't worry about getting every part of everyone's body in - don't worry about fitting in the shoes.

Avoiding gaps means not leaving big spaces between each person. An extension of this idea is to actually encourage body contact. Have arms around shoulders and people leaning on each other. This is because the way people's bodies touch tells the viewer a lot about the relationships between them, adding depth to your photos.

Using simple compositional shapes is the subject of the rest of this posing guide. This means arranging people of different sizes and shapes so the photo looks balanced, interesting and appropriate. Take a look around the page for some simple dos and don'ts.

Next month Next month we show you how to pose individual portraits.





Don't shoot your Christmas shots indoors. Go outside, even if it's overcast, and do it there. You will get a far better quality of











light, but do remember you will still need to use fill-in flash

How to use a flash

Can you bounce and swivel? Matthew Richards shows you how



Clip a dedicated flashgun onto the hot-shoe of your camera and it can be the

start of new photo opportunities. The greater distance between the flash and the lens is a bonus in terms of red-eye but you might find shadows creeping into your picture. Also, direct flash can be harsh. This is where 'bounce and swivel' functions can be useful.

By tilting the head of the flash upwards, you can fire the flash at the ceiling and allow the reflected light to illuminate the scene. This works best on white ceilings that are not too high. However, you can always use a large sheet of white card to bounce light off, or invest in a diffuser.

Hot-shoe shuffle

When using bounce flash, estimate the correct tilt angle by aiming the flash at a mid-point between you and subject. If you aim too low, some of the light from the flash will fall on the upper part of your picture, over-exposing it. Aim too high, and insufficient reflected light may reach your subject. In general, try a tilt angle of around 60 degrees, with the reflecting surface between one and two metres from the flash itself.

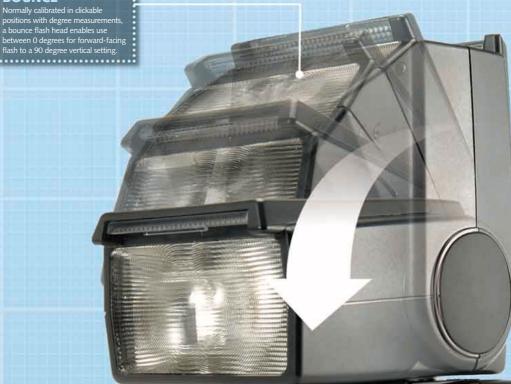
The 'swivel' mode of a flash is good for taking photos in portrait orientation (high rather than wide). As you pivot your camera through 90 degrees, the regular bounce function of your camera will be aiming at a wall rather than the ceiling overhead. The swivel feature fixes this by enabling you to tilt the flash head in the opposite plane.

The right options

First of all, you need to ensure that your camera has a hot-shoe for attaching a separate flashgun. Next, look at your camera manufacturer's website for a list of compatible flashguns. Hopefully, this will include dedicated features for flash metering, auto-focus assist and possibly automated flash zoom, as well as basic bounce and swivel facilities. Third-party flash manufacturers like Jessops, Sigma and Vivitar can often be less expensive than the camera maker's own models. As with cameras themselves, you can often save money by buying online.

Bounce tilting (side view)

BOUNCE



AUTO-FOCUS ASSIST

To enable the auto-focus system of a camera to operate in low light conditions, many flashguns feature an auto-focus assist beam which operate:

......

HOT-SHOE CONTACTS





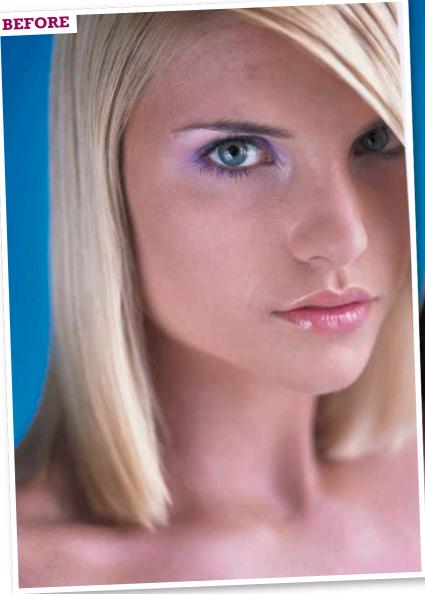


Darkroom basics

Digital makeover!



You don't need bottles of hair dye to give your model a makeover, as *Tim Shelbourne* demonstrates using Photoshop Elements





They say that gentlemen prefer blondes, as in the start image here. But our digital makeover this month is a transformation to brunette $\,$



You'll need Adobe Elements 2, although this will also work with Adobe Photoshop.

What do you do if the subject of your photographs has blonde hair and blue eyes, but you really need a model with wonderful auburn tresses and green

eyes? With the power of Photoshop Elements at your fingertips you won't need to try and convince the sitter to undergo major surgery!

Essentially, to change hair and eye colour, all we need to do is make a couple of Levels adjustments and use the power of Hue and Saturation.

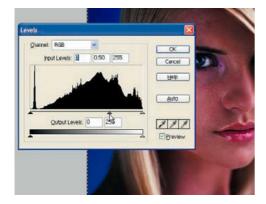
We don't have the luxury of layer masks in Elements but, fortunately, Adjustment layers come complete with a layer mask attached so we can take advantage of this quirk to isolate the changes to certain parts of the image.

Here we're changing blonde hair to brown, but the same principles apply should you need to do the opposite – you simply make the hair lighter rather than darker in the Levels dialog box.

Next month Discover the professional touch-up techniques and tricks that are used to subtly reshape models

ONE-CLICK FIX

For a more dramatic change in hair colour, perhaps to shocking pink, simply adjust the Hue slider on you hair colour



Darken the hair [0m 53sec] Open makeover.jpg and add a Levels Adjustment layer via Layer. New Adjustment Layer. Levels. To darken the image, move the central grey point slider until the corresponding input value reads 0.50. Click on the Brush tool and then in the Brush picker.



Choose a brush [2m 16sec] Choose Pen Pressure from the Brushes dropdown and then Airbrush Pen Opacity Flow. Click More Options and check the Tablet Support box. Go to Image *Adjustments *Invert. Paint over all the hair using white for the Foreground colour.



3 Cheating layer masks [3m 54sec] Layer masks aren't available in Photoshop Elements, so we're cheating a little here. We've applied the white to the empty layer mask, which is attached to the Adjustment layer by default. We're only exposing certain areas of the Adjustment layer.



4 Opacity via pressure [9m 33sec] If you're not using a graphics tablet, you'll need to manually adjust the brush Opacity in the Options bar, using a lower opacity on the ends and edges of the hair. You can reduce the Hardness of the brush via More Options; paint with Black to correct mistakes.



5 Changing the hair [6m 54sec] Go to Layer New Adjustment Layer Hue/ Saturation. Position the sliders as follows: Hue 13; Saturation 56; Lightness -60. Ensure the Colorize box is checked, click OK and go to Image + Adjustments #Invert. Paint over the hair using white.



6 Changing the eyes [13m 56sec] Return to the Background layer and add another Hue/Saturation Adjustment layer (Layer

New Adjustment Layer Hue/Saturation). Check Colorize and use Hue 103; Saturation 18; Lightness -3. Invert the mask via Image #Adjustments #Invert.



7 Changing eye colour [14m 53sec] Use the same brush with white as the foreground colour to paint over the purple eye shadow and the cornea of the eye. Use the brush at a very low opacity and build the opacity inward. Note: you're exposing the attached Hue/Saturation layer via the mask.



Changing lip colour [17m 52sec] Add a final Hue/Saturation Adjustment layer and use: Hue 18, Saturation 60, Lightness -10 to turn the lipstick slightly orange. Invert the mask attached to the layer via Image *Adjustments *Invert and paint with white again over the lips.



9 Fine-tuning coloursAll the Adjustment layers can be modified by double-clicking them in the Layers palette. This way, you can fine-tune the hair, eye and lip colour until you're happy with the result. It's worth experimenting with the sliders to find the best colours.

Technique Elements





Darkroom basics

Radically radial light



Donning his goggles and snorkel, *Tim Shelbourne* explores the unique properties of underwater light, with the aid of Photoshop Elements



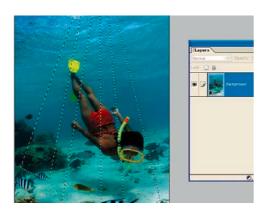
You'll need Adobe Elements 2 although this will also work with Adobe Photoshop.

As we've discovered in this series, light has unique properties, and underwater this is even more true. The way light

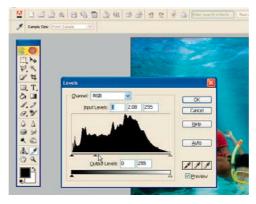
refracts and is filtered through particles in the water results in radiating shafts of light which dissipate as they travel away from the surface. Normally, with shafts of light, we could achieve the required effect with simple gradient fills, but here, to light the diver, we need to use a Levels Adjustment Layer. With this, we can adjust the tonal range within the selected areas, creating a far more realistic effect.

An advantage of using an adjustment layer is that it comes complete with a layer mask, something you don't usually

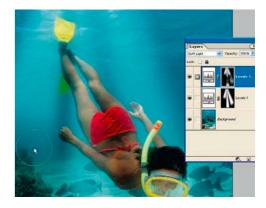
get in Elements. Via the layer mask, and on a duplicate copy of the layer, we can control the opacity of individual light shafts. To introduce a bit more subtlety, we'll employ the ubiquitous Blur filters to soften the rays of light. So, hold your breath and take a trip into the deep... ■



Draw the light shafts [0m 42sec] Open underwater.jpg and choose the Polygonal Lasso tool. Draw three or four triangular selections radiating from the water's surface. Match the position of these selections with the light areas on the seabed. Ensure Add To Selection is active in the Options Bar.



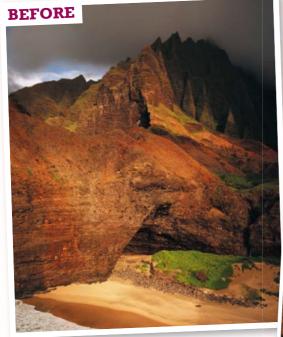
Levels Adjustment Layer [2m 58sec] Select Layer New Adjustment Layer Levels, changing the middle input value to 2.08. Go to Filter# Filter *Blur *Motion Blur. Ensure the Blur angle matches the angle of the beams, using 554 for Distance.

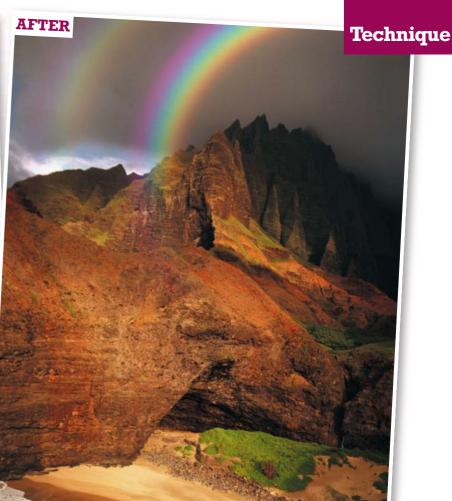


Modifying the intensity [6m 54sec] Duplicate the Adjustment Layer and set the Blending Mode for the duplicate layer to Soft Light. Pick the Brush tool and ensure Foreground Colour is Black. Select a large soft brush and paint at low opacity over the lower half of the light shafts on this layer.

ONE-CLICK FIX

With the Polygon Lasso tool, close a selection by clicking on the start point. Look for the tiny circle next to the tool cursor





Darkroom basics

Chasing rainbows

Spotting a break in the clouds, *Tim Shelbourne* heads for cover and chases rainbows in Photoshop Elements



You'll need Adobe Elements 2 although this will also work with Adobe Photoshop.

As weather phenomena go, the rainbow is guaranteed to delight - apart from its inherent beauty it is the eternal symbol

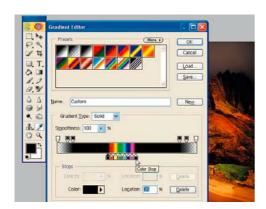
of hope, with its promise of a pot of gold. But, to capture a rainbow with a camera requires a huge amount of luck and is a classic example of the right time, right place school of photography. However, in the world of digital imaging and armed with a copy of Photoshop

Elements, it's far from difficult to add rainbows to images after the event.

Here we'll use the Gradient tool, and Elements helpfully supplies a Rainbow gradient, custom made for the job. To complete the effect we need another gradient over the layer. Because the

Layer Blending mode is set to Screen, we can use a black to transparent linear gradient over the rainbow to fade it towards the horizon.

So, no more waiting around in the rain, no more chasing rainbows... Photoshop Elements to the rescue! ■



The Rainbow gradient

Open darkcloud.jpg and select Layer New Layer. Choose the Gradient tool and click in the Gradient Picker. Select the Transparent Rainbow swatch. Drag each colour pointer until they all touch. Click each side of the main colours to add new points, in black.



Painting the rainbow

Pick Radial Gradient from the Options bar. Click and drag a gradient from left to right between the two points shown above. Set the Layer Blending mode to Screen and position the rainbow with the Move tool. Select Gaussian Blur and use a medium Blur Radius.



Transparency gradient

Choose Black for Foreground colour and pick the Gradient tool. Using Foreground to Transparent, drag a Linear Gradient over the rainbow. Adjust the position and tilt of the rainbow via Image *Transform*Free Transform. Clean up the rainbow using the Eraser tool.

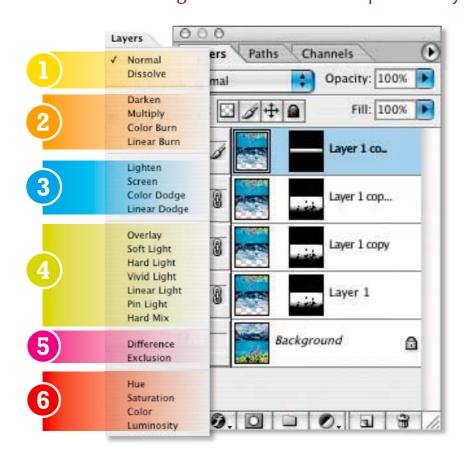
ONE-CLICK FIX

If you can't locate the Gradient tool in the toolbar, it is nested beneath the Paint Bucket tool. Click and hold this to expose it

Going further with Photoshop

How layers work, and how to use them

Previously we covered the basics of layers and layer masks. This time around **Derek Lea** discusses Blending modes and some other powerful layer features



THE BLENDING MODE MENU

Broken up into six different categories, the Blending mode menu offers up numerous choices for how to blend your layers with underlying imagery.

1. BASICS

Pixels simply sit on top of the underlying pixels when using these modes. Although dissolve is noisy, the blending effect is quite basic.

2. BURNING

This category contains Blending modes that are useful for darkening only. Pixels are either blended to burn underlying images or only darker pixels remain visible

3. DODGING

The opposite of the previous category, these blending modes offer up different methods to lighten and/or dodge the pixels while blending with underlying layers.

4. LIGHTING

Blending gets a little more complicated here. The effects $% \left(1\right) =\left(1\right) \left(1\right) \left($ can be quite dramatic and many are useful for affecting contrast and saturation past the point of realism.

5. INVERSION

Strange effects are achieved here via subtractions of base or blend colours depending upon greater brightness values. Both modes produce a similar result.

6. COLOURS

This section enables you to blend a single aspect of what makes up your layer content with the underlying pixels by isolating it from the other aspects.

An understanding of layers and layer-related features is essential to getting the most out of your images in Photoshop. As you

continue to follow through this five-part series, we'll explain the powerful functions and features related to layers. In the first part of this series, we explained the basics of layers and how to work with them.

This time around we'll introduce you to layer Blending modes, which control how your layers blend with the rest of the image. In addition, we'll explore some powerful layer organisational features.

Blending modes

Layers are stacked up on top of each other and the stack order and contents is shown in the Layers palette. Each layer has a Blending mode assigned to it. A Blending mode is what specifies how the contents of a layer will blend with the contents of underlying

layers. The default blending mode is Normal, which means that the pixels of your selected layer will sit on top of the other layers and blend normally with the underlying layers.

Layer Blending modes are specified by first selecting a layer in the Layers palette and then choosing a Blending mode from the pull-down menu in the upper left side of the Layers palette. There are 23 different Blending modes to choose from and they're divided into six categories within the Blending modes pulldown menu.

Naming layers

When you are working with layered files it doesn't take long for you to build up a considerable amount of layers. Sometimes when layers become too numerous it can be confusing to navigate the Layers palette and edit your desired layers. Thankfully, Photoshop

offers up some excellent layer management and organisational features. You can rename any layer by simply double clicking on the layer's name in the Layers palette. This will highlight the text field and make it editable.

It is also possible to rename a layer by selecting it in the Layers palette and then choosing Layer Properties from the Layers palette menu. A dialog box will appear with a text field for naming your layer.

Layer thumbnail colour

Another interesting feature within the Layer Properties dialog box is the ability to choose a colour. The Colour pull-down menu offers up to seven different colours to choose from. When you specify a colour, your layer thumbnail is coloured in the Layers palette. This will affect the thumbnail only, and not your layer contents

ONE CLICK FIX

Drag the layers in order to moved them up and down in the layer hierarchy within the Layers palette

Blending modes revealed

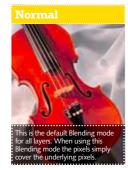
There are a vast amount of options when it comes to using Blending modes. Each of these three different images has an object on a single layer sitting on top

of a background layer. We have altered the layer Blending mode each time, using an image that best displays the result. To get a better idea of the results,

first have a look at the three images in their original, unaltered states, with the Blending mode of the layer set to Normal.

Darkening

There are a number of modes that enable you to create various darkening or burning effects. In addition to darkening underlying pixels, you can create a couple of odd inverted colour effects.



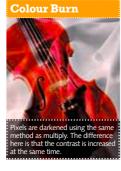






























Lots of options

Again, a plethora of different options affords you the opportunity to blend layers in almost any manner. Some observe underlying colour values. Other options will even use hue, saturation or luminance independantly.





















Technique Photoshop

Getting into the habit of naming and colour-coding your layer thumbnails is an excellent way to assist in navigating the stacks of layers in the layers palette.

Linking layers

One or more layers can be linked in the Layers Palette. The advantage of linking is that when you move or transform a layer that has others linked to it; the linked layers are moved or transformed identically as a group.

Link layers by clicking in the column to the right of the visibility icon in the layers palette. Click in the area on the desired layer and a link icon resembling a chain will appear to indicate that it is linked to your selected layer. To unlink a layer, click on the link icon to make it disappear. You can link more than one

layer to create a linked group of layers. Linked layers provide special alignment and distribution features.

Merging layers

Your stack of layers can be reduced by merging one or more of your layers into a single layer, or flattening the image entirely into a single background layer. The merge and flatten options are available in either the Layers palette menu or the layers menu.

The Merge Linked option will enable you to merge all of your linked layers into a single layer. If your currently selected layer is not linked to any other layers, this function is changed in the menu to Merge Down, which means that your current layer will be merged with the layer underneath. The Flatten

Image option will merge all layers into a background layer and the merge visible option will only merge visible layers.

Matting and defringe

Often when you paste a selection into a file as a new layer, a fringe of pixels will remain due to anti-aliasing. The Matting options under the Layer menu are there to fix this. If you are pasting an image cut from a light background the Remove White Matte option will be perfect and if you're pasting an image cut from a dark background then use the Remove Black Matte option. The Defringe option replaces the colour of edge pixels with those of neighbouring pixels.

Next month We reveal more of Photoshop's layer controls

Tool school

Merge and flatten functions

Photoshop provides you with three different functions that will enable you to combine layers within a file.



Merge Linked Merging linked layers is as simple as selecting a linked layer in the layers palette and then choosing Merge Linked from the Layer menu. Or you can type Ctrl/Command-E on your keyboard.



2 Merge Visible
Choose this option from the Layer menu to merge all of your layers that have their visibility currently enabled, into a single layer. Or type Ctrl/Command-Shift-E on your keyboard.



3 Flatten Image Choose this option from the Layer menu to merge all of your layers into a single background layer. All three of these functions can be found within the Layers palette menu as well

Layer alignment and distribution

Whether you are designing a web page or a postcard from your photos, Photoshop provides features that help you lay things out with precision



Alignment uses Understanding the layer alignment tools will save you time and provide greater accuracy when laying things out. To lay out these simple buttons, the first order of business is to link a word layer to a button layer.



Repeated alignments The button and text are merged using the merge linked option. This was repeated to create two more buttons. Then the three layers were linked and aligned horizontally.



Vertical alignment There are three options for vertical alignment in the Align Linked section of the Layer menu. You can align the tops, bottoms, or centres of linked layers. Here we aligned the vertical centres of the text and the button layers.



5 Distribution uses
You will notice after you align the three buttons horizontally that the vertical spacing between the buttons is not consistent. This is why there are a series of Distribute Linked options.



alignment After the vertical alignment is performed, use the same method to align linked layers horizontally. You can align the centres, left, or right sides. We chose the centre option again.

Horizontal



Distribution options Distribution distributes the linked layers evenly, leaving an equal amount of space between them. Here you can see the effects of choosing the Vertical Centres option.

Drag a group of linked layer from file to file by using the Move tool to drag from the image window rather than dragging

Composite scenes

Put your new knowledge of layers into practice to create this stunning composite mountain scene

In part one of our guide to alayers you learned all about duplicating layers and adding masks. We'll put those newly found skills into practice once again, as well as throw in some new techniques we've covered right here in part two.

As you use the Paste Into option you will notice that your masks aren't linked to your layers. The advantage

of this is that you can reposition your layer content within the mask without moving it. Although it isn't necessary for this particular walkthrough, you can link them by clicking the area between the layer icon and mask icon in the Layers palette. A link icon will then appear in the area.

Unlink them by clicking again on the link icon. This will make it disappear.





Add the clouds

Using the mountains image as your working file, use the Move tool to drag the clouds image in as a new layer. Then position the clouds image at the top of the image. Change the Blending mode of the clouds layer to Lighten and then add a layer mask.



2 Mask clouds and flatten

Use a small brush to paint within the layer mask where clouds overlap mountains. Use a black foreground colour. Choose Layer #Flatten Image from the menu. Select the entire image and copy it. Choose Select *Colour Range from the menu.



3 Paste and invert the reflection

Use Colour Range to create a selection that encompasses all of the water. With the new selection currently active, choose Edit Paste into from the menu. This pastes your copied image as a layer masked by the selection. Choose Edit *Transform *Flip Vertical.



4 Edit the reflection mask

Drag the image upwards within the mask so that the base of the mountain image and the reflection meet. Use the Linear Gradient tool to create a black to transparent gradient from the bottom upwards slightly to soften the reflection. Change the Blending mode to multiply.



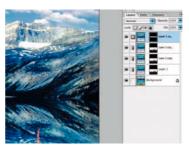
5 Stack up duplicate layers

Reduce the layer opacity to 68%. Duplicate the layer and then change the Blending mode of the duplicate to Lighten. Change the opacity to 70%. Duplicate the layer again and change the Blending mode to soft light, making the contrast in the reflection intense.



Edit the final duplicate mask

Duplicate the top layer and change the Blending mode to Normal. Increase the opacity of this layer to 100%. Use the Linear Gradient tool within the layer mask, again with a black to transparent setting, to mask out almost all of the layer contents from the bottom up.



TLink the reflection layers

Click in the column to the right of the visibility icon for the layer that lies directly underneath the current layer. You will notice a link icon appear indicating that the two layers are linked. Click in this column for all other reflection layers to link them.



8 Transform the linked layers

Select a layer thumbnail, not a mask, from the linked group and choose Edit #Free Transform from the menu. Drag the bottom centre bounding box handle upwards to slightly reduce the vertical size of the selected laver. Notice that all linked layers are transformed.

from the Layers palette. Dragging from the image window brings over all linked layers. Dragging from the Layers palette brings a single layer

Antenna FreeStyle



Turn your digital photos into a fantastic online photo gallery

Publisher: Stormdance

Product status: Full PC product

Contact information: www.stormdance.net

Latest version sold for: 39.99 Euros Serial number: Not required

Purchase page: www.shareit.com/product.

html?productid=175477

Special Offer Coupon Code (to claim 20%

discount): DIGITALH2004



Antenna FreeStyle is the website creation tool you have been waiting for, with an

intuitive tool set tuned to take all the pain out of creating your website. The application's approach to web design is similar to most desktop publishing

packages, enabling you to create text and image boxes which can then easily be clicked and dragged around the screen into position, with all the complex code worked out by the program when you have finished your design.

A flexible friend

If this is the first website that you have built then the easy-to-use tools and templates will guide you through the process quickly. If you have high aspirations for the styling of your site then Antenna has all the flexibility you need to create a professional web base for your work.

This version of Antenna includes a

few added features with the photographer in mind. The addition of Photo Lab will enable you to create the perfect photo gallery ready for the web in just a couple of clicks. The step-bystep below will introduce you to using Photo Lab so you can get your images online and share them with other readers and friends. This tutorial is also repeated on the coverdisc in video format. The second part takes a quick look at ways to customising your web pages with links and extra pages.

Upgrade and save 20%

Stormdance is offering Digital Camera Magazine readers an amazing 20% off the full price when upgrading to the latest version, now called Antenna Web Design Studio.

This program contains many more advanced features, including support for: websites containing hundreds of pages; multiple photo galleries per website; more photos per gallery - no photo limit; large photos – create galleries of images larger than 640 x 480; rollover controls; audio and video controls; forms; JavaScript events; multilingual site creation; and free technical support.

To take advantage of this offer visit the web purchase page listed above and enter the Special Offer Coupon Code.



Creating a new website Launch Antenna and set up a new site under Web New Website. You will be asked if you want to save the default page - cancel this and go to Web. Save and create a new folder to store your website.

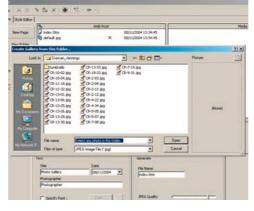
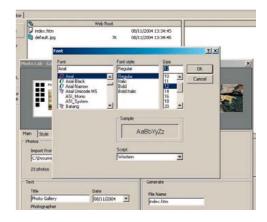
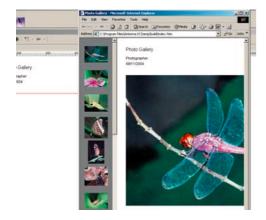


Photo Lab gallery To help you quickly create a photo gallery Antenna has the Photo Lab function; access it via the Web Photo Lab button. In the dialog box choose Browse then select the folder containing your images.



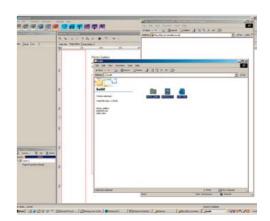
3 Embedding your fontsIn the Photo Lab dialog box click on Font and select the type, style and size. Fill in the relevant info boxes, and then click Style to adjust the layout, background colour, image and thumbnail sizes.



4 Create the Photo Gallery Once you have finished with adjusting the settings that control the handling of content and style, click the Create Photo Gallery button. To preview the site click the eye icon in the toolbar.



5 Publishing your site Click the world icon in the toolbar to publish your site. To upload it fill in your FTP details and any advanced details you need, then click Publish. To export to a folder click Export and select a folder.



6 Alternative FTP
If you experience problems due to firewall settings use the Export function then open up Internet Explorer or your FTP app. Type in your FTP address, select your export folder and upload the contents to your site.

Image Converter



Batch-convert your images quickly with Neomesh Image Converter

Publisher: Neomesh Product status: Full PC product Contact information: www.neomesh.com Latest version sold for: \$17.95 Serial number: n/a Purchase page: www.neomesh.com/ order/mag.html

Neomesh Image Converter is the perfect solution for fast, effective image conversion. If

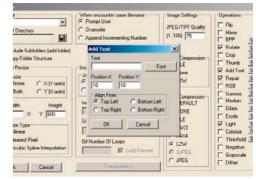
you need to quickly reduce the file size of your day's shoot ready for uploading to a website, or want to squeeze all your catalogued images onto a CD, this is the perfect tool. The application enables you to quickly select an image folder ready for conversion, choose a destination folder and then apply a variety of adjustments. These include changing file type, image size, rotation and a huge host of colour, contrast and other fast image manipulation. Neomesh is offering readers of Digital Camera Magazine an upgrade to WinGraphic Pro for a mere \$22.95 for the download version. To take up this offer please visit Neomesh's special purchase page.



Format and folder selection Open Image Converter and click File Add folder, locate the image folder and click OK. Go to Edit+ Settings and from the drop-down menu choose the format to export the files then select the output folder.



Batch resizing your images To resize your images go to the Image resize box and select Both. For example, if your image is 800 x 600 and you want to reduce it to 640 x 480, that's a 20% reduction.



3 Rotation and outputThere are a variety of quick conversions you can apply to your images. To rotate, click in the Operations box, tick Rotate and then Settings, and you can then choose the orientation. Click OK to convert.

Roxio Toast LE



Fast effective burning

Publisher: Roxio Product status: Full Mac product Contact information: www.roxio.com Latest version sold for: n/a Serial number: www.roxio.co.uk/CD Purchase page: www.roxio.co.uk/adban/ digitalcamera/upgrade/toast

Toast has become the standard burning software for the Mac, with its intuitive interface

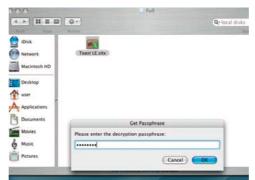
enabling quick drag-and-drop burning. This month Roxio has given us a fantastic LE version of the software, which will help you to back up all your

image files to CD. In addition to the standard data-burning features this LE will enable you to create audio CDs and quickly duplicate your existing backup discs with a few simple clicks. If you find that Toast is everything you have been looking for in burning software then

Roxio is also offering Digital Camera Magazine readers an upgrade to the latest Titanium version, with extended features and the ability to handle DVD burning. To make the most of this offer please follow the links on the disc to register and purchase the software.



Registration Copy the Toast file from the coverdisc to your folder. Click the registration link to visit the Roxio site and enter your details. You'll then receive a serial code.



2 Installation
Double-click the Toast file (you'll need the latest version of Stuffit, www.stuffit.com). When prompted enter the code. Double-click the Toast LE icon to install.



🔿 Burn a disc Open Toast LE and click the Data button. Drag the files to burn into the window (double-click the disc name to change it). Click Burn and select Write Disc.

Managing your files

How to retrieve a deleted photo

Losing precious photos is scary, but it's not the end of the world - Geoff Harris explains how to use your PC and some cheap software to retrieve those precious shots





If there is one downside of digital photography, it's the ease with which you

can accidentally delete photos. After all, the images are just digital files; fundamentally no different from MP3 tracks or Excel spreadsheets.

What happens if your memory card gets damaged or corrupted, and stubbornly denies access to its precious photographic cargo? We don't know of any camera manufacturers that supply photo-retrieval software with their equipment, but the good news is that a decent array of third-party programs

This tutorial will introduce some of the most effective, best value image recovery programs, and also share some tips for better protecting your digital photos next time.

As our step-by-step guide shows, using photo recovery software is very easy, but it should be seen as the last resort rather than the first. A much better solution is to 'protect' images

using the camera's software, or by locking the memory card (this is only possible if you use SD cards).

A guick read of the camera manual should explain how to lock shots so they can't be accidentally deleted - this is usually signified by a padlock icon, or similar security device, on the LCD.

Oops, I did it again...

Obviously, it's easy enough to accidentally delete photos from a memory card if you're tired or unfamiliar with its various menus, but why would a memory card become corrupted, apart from the effects of physical damage?

Most memory cards use a system for remembering stored data called a FAT (file allocation table). This record can become 'scrambled' if the memory card is interrupted while it's transferring or copying images.

If you copy images from camera to PC via a USB cable, for instance, you'll find that this will drain the camera's

batteries faster. If the camera batteries suddenly give up the ghost during the image-transfer process, the FAT can get hopelessly mixed up.

So if you frequently copy shots from PC to camera, it's well worth investing in a memory card reader, rather than going through the fuss of connecting USB leads each time.

Jessops or PC World will sell you a multi-format memory card reader that plugs into a USB socket on your PC for around £15. These also make it easier to retrieve photos from a scrambled memory card (see walkthrough).

Appetite for destruction

But what should you do if you still can't retrieve photos from a memory card or PC using image recovery software, or you're faced with a physically damaged card? For starters, you should never try to 'force' a bent or buckled card into a reluctant memory card reader, as it could get jammed in there permanently.

However, the good news is that

memory cards are surprisingly resilient: in a recent 'tested to destruction' feature published by our sister magazine, Digital Camera Shopper, the most popular types of memory card only gave up the ghost when they suffer unrealistic degrees of physical punishment - in one case, being nailed to tree!

And even when recovery specialist Kroll Ontrack was presented with the shards of a smashed xD card it was able to retrieve some of the photos - at a cost, of course.

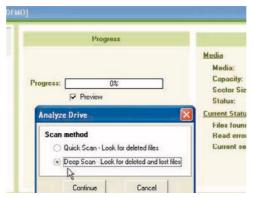
So don't worry unduly about the longevity of your digital photos, but don't take them for granted, either. Now see below for how to use your coverdisc software... ■

Next month Turn your digital photos into wallpapers and screensavers for your PC! It's essential reading for personalising a PC with your best shots. Plus step-by-step guide and software on your coverdisc.



Retrieving photos in camera

A powerful program to use is mediaRECOVER, which you can try on our coverdisc. Here, we are using it to recover photos from a memory card, which has been wiped completely clean by our camera's software. Start by connecting your memory card/ camera to the PC and scanning the relevant 'drive'.



Shallow or deep scan?

When starting the program, choose 'Deep Scan' if you want to be sure of getting all the images back from your card. Just bear in mind that this is a powerful program that will try to retrieve any shot that's ever been stored on that memory card, hard drive or other storage medium.



FAT busters

Eventually, mediaRECOVER will get back the images that the camera swears it has permanently deleted. The program has bypassed the scrambled FAT file storage system, as explained in the main text of this tutorial, and pieced together the deleted images bit by bit. Slow, but effective!

ONE CLICK FIX

Physically smashed up a card, but still need to get photos off it? Visit krollontrack.com - but be warned, it'll cost you!

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photography at imagesofcities.com. www.dcmag.co.uk/forum



Barry Jackson Barry is a published photographer, Photoshop expert and digital imaging artist. He'll solve all your Photoshop and

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Nick Merritt Nick is Group Senior Editor at Future and is a published Photoshop, PC and internet

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 By website: www.dcmag.co.uk/forum
 By letter: Photo Q&A, Digital Camera
- Magazine, Future Publishing Ltd, 30 Monmouth Street, Bath BA1 2BW

ADVICE ON BECOMING A BETTER PHOTOGRAPHER



There is so much information about how to become a better photographer, it can be

overwhelming. What do you think is the single most important factor for people to improve their photography?

Adrian Dee



As an ex-teacher, I can honestly say that the most important factor in improving your

competence in photography is your attitude to the task. You might be very able, but if you don't have the right attitude, you won't make much progress. On the other hand I've seen people of only average ability turn out high quality work, and the key element is attitude.

Laziness is a common problem, but why are people lazy? Often because they lack confidence and motivation. The way to build confidence and motivation is to get onto what I call the cycle of improvement. Like a bicycle, it will take you a long way and the motive power your energy, and determination - is free.

So what exactly do I mean by the cycle of improvement? It's an attitude towards the task - in this case making pictures by which you celebrate your successes and learn from your mistakes. If you do something well, build on it. If you did something not so well, avoid the error next time.

The trouble with photography is that people believe that in order to make a great photo, you require some indefinable piece of wizardry that you either have, or more likely, haven't got.

That's rubbish! Everyone has the capability of taking great photographs, you just need the time and space to



"My early attempt at capturing this shopping centre in Dubai was less than promising. The results lacked sharpness." develop your competency, and understanding, using your innate talent big or small.

And the key to success is the cycle of improvement. It operates in small increments - a mistake noted here and not repeated, a technique picked up there and used in a future shoot. Slowly you improve, so that when you look at your efforts from a few years ago you're struck by the progress you've made.

Expect to make mistakes, and be glad when you don't. Keep improving, keep developing and keep enjoying.



"Later I was able to vastly improve on my early attempt and used the experience I'd gained to create a much better image."

STEREO FILM CAMERA



My interest in 3D photography was rekindled with a brilliant program called Z-anag, which

produces an anaglyph from two photos of a subject taken approximately 70mm apart. I've been using a Kodak digital camera (DX3600) but, to ensure accuracy, I have to use a small wooden table to rest the camera, so I can move the camera 70mm to the right for the second shot.

Is the Loreo stereo camera a worthwhile buy, or are there other makes obtainable in the UK? A stereo digital camera would be ideal but I gather none is available. The problem with a camera such as the Loreo is I would have to have the film developed and printed and then scan the left and right prints and use the Z-anag

program to get my anaglyph. Any advice would be welcomed.

■ Jake Stewart



To my knowledge there's no stereo digital camera available anywhere. The Loreo film

camera is a handy and convenient device that produces reasonable quality photos, but there's only one problem: it's a film camera!

It's quite feasible to make stereo photos with a single digital camera, but only with static subjects.

If you have a digital SLR, you can buy the Loreo 'Lens In A Cap' which turns a digital SLR into a stereo digital camera. Like the Loreo film camera, the quality is reasonable, but can't compete with the sharpness and

clarity of a single high quality lens. The 'Lens In A Cap' has a pair of tiny lenses, which receive the image via a set of double mirrors. Its speed, convenience, and relative cheapness

make it well worth buying. So my advice would be either to continue with the single digital camera and take static subjects, or invest in a digital SLR and get the Loreo LIAC.



YOU'RE THE EXPERT... FORUM VISITOR ADRIAN ALTMAN ASKS. "WHICH ZOOM LENS DO I NEED?

Can somebody please explain zoom lenses to me? I am a total novice. I want to get as close as possible to architectural details. Which is the best lens for this: 28-300, 28-200 or 70-300?

■ Harry Shepherd says... Normally a wide-angle lens would be the answer (there are specially designed lenses with rising fronts for architecture). However, the use of PS can compensate for converging verticals. I usually use my 24-70mm for architecture, and at times 24mm is not wide enough. If you want to isolate the detail of, say, a gargoyle high up on a church, you will need a big zoom. If you have a DSLR you may get away with a 70-300mm, which would give you a range of approx 105-450mm. With an SLR probably the Sigma 50-500mm would be best. If you are thinking of buying a compact digital, then probably the Panasonic FZ 20 would be the one to look at: Leica lens, f2.8, 12x zoom, £400.



STOCK LIBRARY



How would I go about finding out the general criteria for photographs to

be submitted to stock libraries? What type of camera would provide the quality/specifications that the photo libraries require? What training if any would be ideal to enable someone to be able to provide the quality and type of photos required?

■ Sue Sysum



To find out what submission requirements are, look on the websites

of stock libraries, for instance the company Alamy.

Whatever resolution the photo is captured at you are asked to upsize it to 48 megabytes using interpolation software. The photos should be captured on a camera capable of producing a minimum 18 megabyte file. That equates to a 6MB camera (eg. 3,000 x 2,000.) Photos are to be sent on disk

and you are advised to edit your



portfolio before submitting. You can find our more details about the technical requirements at www.alamy.com/stockphotography-guide.asp. Look at the photos they offer to gain an idea of what they are looking for.

As for learning how to do it, there are many courses available from your local college.

USE OF LIGHT FOR IMAGE CAPTURE FLASH OR NO FLASH?

I took the exact same picture, with the same settings, and the same distance... one with flash, and one without flash. The difference was huge; the non-flash picture looked out of focus and was blurred. Now what I don't understand, is why the flash would affect the focus at all, or even cause blurring...

■ Pat Horn



The non-flash picture probably wasn't out of focus, it was just unsharp due to motion blur caused by movement of the camera. Outside on a dull day or inside in normal domestic lighting, light levels are far below

what most digital cameras require. To let in enough light to make a usable image on the sensor, the auto exposure settings will adjust the shutter speed down to perhaps a quarter of a second, maybe longer, making it difficult to hand hold the camera.

Once the flash is on, the aperture is stopped down and the shutter speed is faster. The photo looks different because flash is the only light source. Flash lasts only 1/6,000th of a second, and freezes all motion. Because the aperture is small, the image looks sharper.

I have developed a skill to shoot without flash in dim light with a powerful zoom lens, here are some of the results.



1a. No flash

I was using my 300mm zoom lens with the Nikon D100. I wanted to avoid flash, which can be intrusive. Choosing aperture priority, I set a shutter speed of 1/25th of a second. I hand held the camera and tried to shoot when he wasn't moving.



1b. Lighten with Photoshop

After opening the file in Photoshop, careful use of the Levels control lightens the picture and brings out a huge amount of detail. This image captures the mood and atmosphere much more effectively than an intrusive flash would have done.



2a. No flash

With no flash, the camera is using ambient light. Long shutter speed has caused blur due to movement of the camera. If the camera had been secured, and the white balance set to incandescent, the picture would have been sharp.



2b. Flash

The photo taken with a flash is sharp and well lit, by the flash gun on the front of the camera. The flash means the shutter speed is fast enough to prevent the possibility of camera shake which can cause blurring.



3a. No flash

Photographing a subject from a distance is difficult whether or not you use flash. To get a close-up, I used the digital zoom. I was using a compact digital camera at the time. I tried to shoot in between movement, but there is a lot of blur.



3b. Flash - red-eye

Use of the flash has improved the sharpness - because flash lasts only around 1/6000th of a second it freezes motion. But there is red eye due to the long distance from the camera.

How to send in your pictures...

Every month, we showcase dozens of reader photos – here's how to get yours noticed



BY EMAIL

This is by far the quickest and easiest way to send your images to us. Your emails

will automatically be forwarded to the correct department.

- ⇒ Please attach only one picture per email and include your full name, address and details on how, where and why you took the photo.
- As we receive hundreds of entries each month, no individual correspondence can be entered into.
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gallery.dcm@futurenet.co.uk with the subject line 'Hotshots'

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with the subject line 'Photoshop'



BY POST

If you don't have access to email, you can send us up to 20 pictures burnt onto a CD or

as prints. A CD is best as we will be able to use the image file in its original format, rather than using a scan of your print. Unfortunately, we are unable to send materials back to you, so please don't send in anything that isn't a copy!

If you'd like us to confirm receipt of your photos, please include a stamped, selfaddressed postcard -we'll pop this in the post when we receive your letter. Apart from this, no individual correspondence will be entered into. Send your pictures to: The Editor, Digital Camera Magazine, Future Publishing, 30 Monmouth Street, Bath, BA2 6QD.









Picture submission form

DigitalCamera

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Make sure you include the following:						

A CD of images A sheet of good quality thumbnails Your name, address, email and phone number on each CD and print

By sending us your images, you confirm that the pictures have not been printed in any magazine nor sent to any other magazine previously or within 3 months of you sending them to us. You give us the right to print the photos you send where and when we see fit, in this or any other affiliated magazine.

ix of the Best page 12



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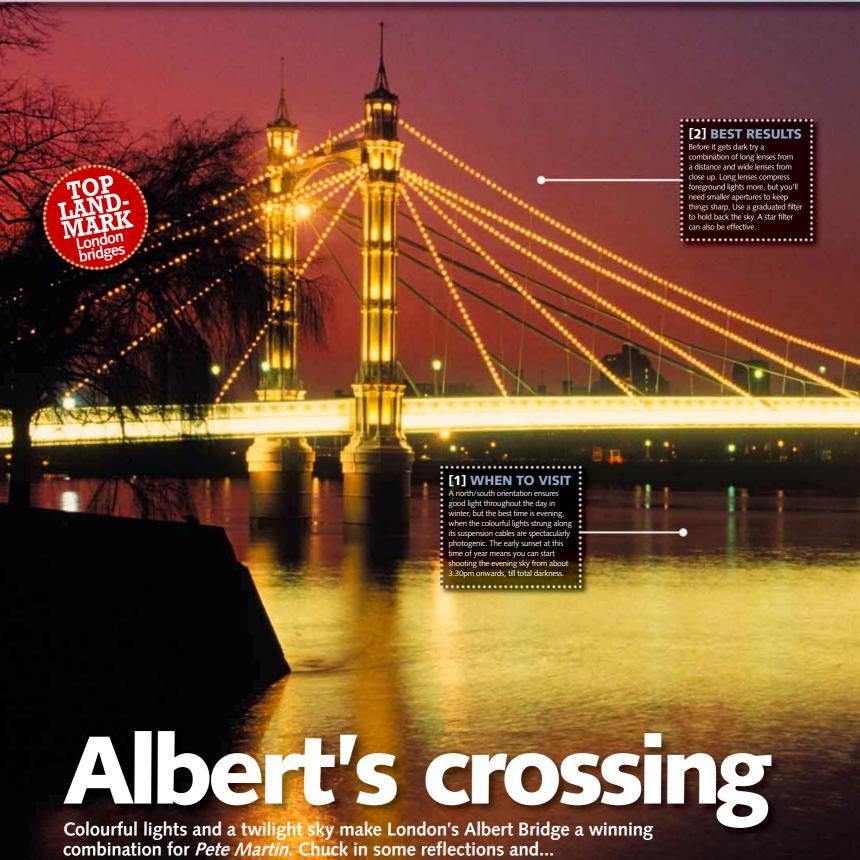
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Must-see photo locations Christmas 2004





Rock of ages

Heavenly views and an ancient stronghold attracts Bob Croxford to Cornwall's most magical landmark, St Michael's Mount

ew islands the size of St Michael's Mount, off Cornwall's southerly coast, can boast a priory, a castle and a stately home. Stick it in one of the prettiest bays in the world and you've a recipe for perfect pictures.

Pre-dated by the original Benedictine priory established in 1135 by the Abbot of the Mount's French twin, Mont San Michel, the fairytale castle atop the 230ft high rocky outcrop dates back to the 14th century. It's had a chequered history, being seized by King John while Richard I was at the Crusades, and later becoming a Royalist stronghold during the Civil War. Since 1660 members of the St Aubyn family, who live there still, have occupied it.

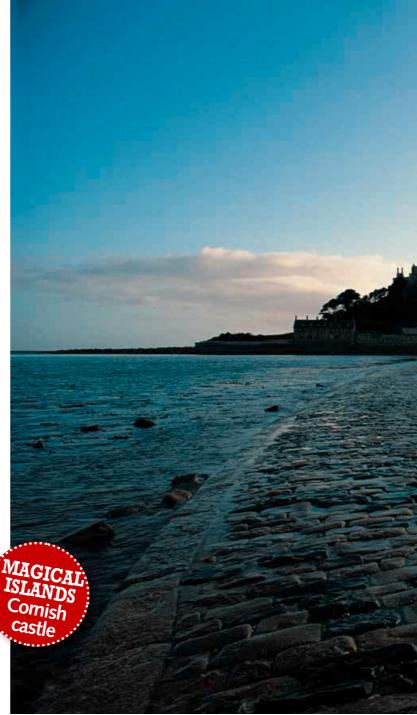
A cobbled causeway accessible only at low tide links the island to the mainland. The minute village and picturesque ancient harbour on the water's edge will keep you occupied should you miss your 'window', and when the castle itself is open there are great pictures to be had in its picturesque gardens and grounds, with superb panoramic views from the ramparts. Low water is also the best time for shots from Marazion beach, when the exposed causeway draws the eye in a lazy curve from the rocks and pools visible on the sandy beach.

With such a lot of it around, the sky will necessarily be important so make sure it has interest; the southern aspect ensures great light at boyh ends of the day. The Mount is a dominant landmark around the bay, visible from Penzance to the Lizard, but perhaps the most evocative long views are from the east, around Trenow Cove and Perranuthnoe, when the castle's distinctive profile is silhouetted against the distant coastline and the evening light.

Below right The Mount's distinctive profile is visible all around Mount's Bay. A graduated sunset filter will pep up weak skies

Below Wander around the foot of the island and you'll get great images from the beaches on the far side from the harbour









FACTFILE: ST MICHAEL'S MOUNT

What is it?

Named after the archangel Michael who appeared here to fishermen in 495AD, the Mount and its harbour have provided a safe haven for sailors since the Iron Age when it was an important trading port.

Photo opportunities?

Seascapes, sunrise and sunset, rock pool wildlife, moored boats, surfing and windsurfers, fabulous gardens and panoramic views.

What are the facilities?

Access to the island all year. Castle (£5.60) and NT restaurant open April to October (plus Mon, Wed and Fri during winter subject to weather and tides), otherwise facilities in Marazion.

HOW TO GET THERE?

Accessibility: easy

Turn south to Marazion off the A394 Penzance to Helston road. Car parks near the beach. For tide information tel: 01736 710265



Left The state of the tide will determine foregrounds. The best are when the cobbled causeway is visible, acting as a great lead-in



Heavenly views of the Mount

Description The local helicopter service to the Isles of Scilly provides amazing aerial views of St Michael's Mount. **Information** British International run scenic helicopter flights from Marazion starting at £35. For further information, visit www.scillyhelicopter.co.uk

Expert advice

A long zoom lens (35-200mm) will make the most of the trip. To avoid vibration set a fast 1/250th shutter speed or above. Also, don't fit a polariser – it will conflict with polarised glass in the windows!





Angels, demons and gargoyles

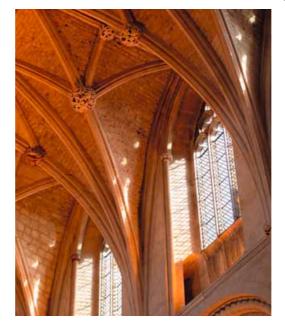
Pete Martin explores the ecclesiastical attractions of his local church and finally sees the light

pectacular architecture, lavishly carved stonework, and often the best setting in town - few buildings i will provide such a variety of imagery as your local church and visits at different times and seasons will always be rewarding for the dedicated photographer.

Older churchyards are usually full of ancient gravestones, superb when a glancing low light picks out their carved detail and ideal shot close up to frame the church, as is the traditional lych gate. Winter days are perfect, especially when everything is dusted with snow. Generally east-facing apses are best in the morning while the west front, usually the most picturesque façade, is better in afternoon light. Don't forget twilight, when the evening services turn the windows into blazes of colour.

Church towers offer a unique perspective on roofs and churchyards as well as close-ups of the grotesque gargoyles. Larger cathedrals regularly allow public access, otherwise ask your wardens

Inside, marble statues, carved wood and rich altar cloths offer intimate details, while stained glass windows make great pictures in their own right or stream coloured light across paved floors. Create attractive patterns from repetitive nave architecture or turn your camera skywards to capture heavenly arches and soaring vaulted ceilings



Expert advice

Lighting

Church interiors are awkward to master but a few simple techniques increase the chances of success. Low light levels demand a tripod to allow longer exposures. Avoid areas of high contrast, resulting in featureless shadows or burnt out highlights, by excluding windows where possible. Shoot either high-key or low-key pictures, don't try to capture it all. Stained glass is best photographed on an overcast day and not in direct sunlight.

Above Be careful with your verticals, wideangle lenses can exggerate converging verticals, as in this shot of Exeter cathedral

Left Take a series of spot meter readings to determine the exposure range in high contrast situations

Getup&go What's o

What's on Your monthly guide to the best photo opportunities

Exhibitions

Johan Grimonprez – Looking for Alfred

The new commission by the Belgian, maker of Dial H-I-S-T-O-R-Y. Looking for Alfred is a surrealistic photographic journey taking inspiration from Alfred Hitchcock's walk-on cameos in his own films.

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Faking It: Between Art Photography and Advertising

Faking it demonstrates the visual parallels that occur between art, photography and advertising. It does this through a series of striking, staged images.w

When Until 9th January
Where National Museum of Film,
Photography & Television, Bradford
Price Free

Details www.nmpft.org.uk
Telephone 0870 7010200



This Is America

Documentary photography from Depression-era America, including iconic work by Walker Evans and Dorothea Lange.

Where The Lowry, Pier 8, Salford Quays, Salford When Until 2nd January Price Free

Details www.thelowry.com Telephone 0870 787 5793

Robert Frank – Storylines

Images from Robert Frank's four series of photographs of life in the 1950s from his travels through Peru, London, Wales, and Black, White and Things.

Where Tate Modern, Bankside, London When Until 31st January Price £7, £5.50 concessions Details www.tate.org.uk Telephone 020 7887 8888

Norman Parkinson -Portraits in Fashion

Treasures from the lens of the famous Vogue and Harper's Bazaar photographer, including studies of Montgomery Clift, Wenda Rogerson and Audrey Hepburn.

Where Bookshop Gallery, National Portrait Gallery, London When Until 16th January

Details www.npg.org.uk

Events

Nikon Film Scanners Course

Get to grips with your CoolScan or SuperCoolScan scanner with this one-day course in which you will gain a general understanding of Digital Imaging and practises. Other courses about D70, D100, D1 and D2H available.

When 8th December and other dates Where Kingston Price £120 (scanning) to £160 (D-SLRs) Details www.nikon.co.uk/training Telephone 020 8541 4440

Photoshop for Photographers

Full-day courses for all abilties to help you edit full colour RGB images in a digital environment. The courses cover topics from camera capture to print.

When/Where Nottingham 6th Dec, Bristol 8th Dec, London 9th Dec Price £79, £59 for Adobe aList members Details www.photoshop4 photographers.co.uk

Competitions

Image Photography Competition

Win £1,000 of kit and membership to the RPS with your images of how science is changing our minds, bodies and the world we live in.

When Deadline 14th January
Price Free, upload images online
Details www.bbc.co.uk/science/
humanbody/competition/

Wild Sheffield Competition

Capture the wildlife of Sheffield and the Peak District to win a spot on an advertising campaign.

When Deadline 31st January
Price Free
Details www.wildsheffield.com

Confetti Christmas Tree Competition

Submit your best shots of a decorated Christmas tree.

When Deadline 5th January
Price Free
Details www.confetti.co.uk/cafe/
competitions/xmas_tree/





Write in today! Been to one of the above events? Got a story to tell or a shot to showcase? Email us now, to events.dcm@futurenet.co.uk

Panasonic () ideas for life



PANASONIC BATTERIES UNVEILS EVOLUTIONARY NEW BATTERY FOR DIGITAL CAMERAS

With the boom in digital photography, music and games, the demand for smaller, lighter and more powerful batteries is increasing. To meet this demand, Panasonic Batteries is launching the Digital Xtreme Power battery: a revolutionary new battery that delivers higher power and lasts longer in high drain digital appliances such as digital cameras.

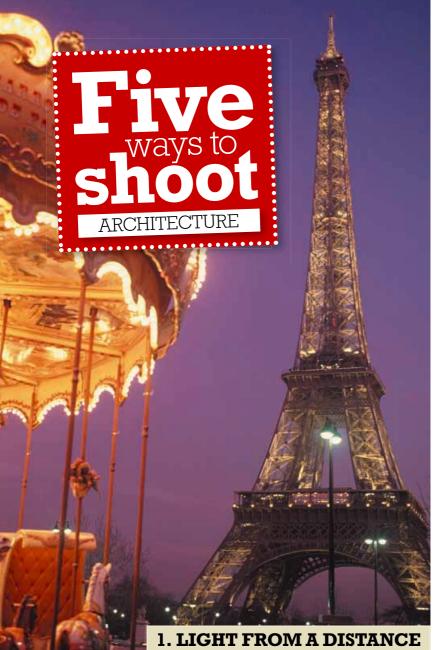
The new Digital Xtreme Power battery enables photographers to shoot up to two times more pictures than any traditional alkaline

batteries available on the market. It also enables faster shooting and more rapid flash recovery improving user convenience.

The Digital Xtreme Power battery has been developed with a revolutionary technology based on new ingredients and an advanced manufacturing process. The new generation battery will be part of a new battery range called Oxyride and introduced in Europe in 2005.

For more information on Panasonic batteries, please go to www.panasonic-batteries.com







1. LIGHT FROM A DISTANCE

Buildings look fantastic lit up against a night sky. The best time to get shots like these are just after sunset, when there's still some colour in the sky but there's no brightness to interfere with your shot. You will need a tripod or a secure position and either a cable release or a remote control, so the action of pressing the shutter release doesn't jiggle the camera. We suggest metering one of the medium-bright spots and bracket your shots to ensure the proper exposure.

2. USE VERTICALS

Make converging verticals work for you rather than against you by tilting back and using them to create a strong vanishing point. Another benefit is you get to fill the frame aggressively and leave out those distracting foreground elements. Here, see how the verticals converge to a vanishing point that's placed according to the rule of thirds

3. USE IT AS A BACKDROP

Try to tell a visual story by including other elements in the composition. There are a number of ways you can do this: the best is to try to find two themes that have some tension in relation to each other and get them in the same shot. A classic is 'old and new' - that is, an old building next to a new one (suggesting evolution and development). Another is 'animals and environment', for example these pigeons making a living in a city. Here a wide aperture -f/4 was used to create shallow depth of field, blurring out the Eiffel tower in the background.

4. GET UNDER IT

Take a more abstract approach and shoot from directly under it, if possible. If that is not possible for your subject, get over it instead. This great shot is all about line, pattern and texture rather than the

Don't settle for the same subject shot in the same way. George Cairns reveals five angles you can apply to architecture and building shots



The best pictures are often about familiar themes, but how do you take a picture of a familiar theme without it looking, well, over-

There are a number of techniques for this, but this month we're going to concentrate on angles. The secret of angles is that they provide a means of getting a different view on the same old stuff, therefore communicating a sense of freshness.

Finding an interesting angle and shooting from there enables you to achieve a number of things: you can focus on interesting shapes, fill the frame with detail or you can use perspective to draw the eye to vanishing points. The key thing is to avoid something that has been seen

loads of times before. We've taken the Eiffel Tower because we want to show you five very different ways to approach a popular subject.

Equipment

When using wide-angle lenses, the lower the angle from which you shoot, the more vertical lines tend to appear to 'lean into' the shot. Pro photographers correct this by using a shift lens, but you can address it either by shooting from a more elevated angle (either from another building or by using a ladder), or by using the Transform tool in Photoshop or Elements.

However, you can use these converging verticals to your advantage, as explained on this page.

Use converging verticals ✓ Focus on patterns ✓ Focus on patterns ✓ Use aggressive crops ✓ Tell stories Plonk the subject in the middle of the frame X Get too far away

CHECKLIST

When metering for correct exposure, most buildings shouldn't give you too many problems unless you're shooting at night, but if the exterior is highly reflective, you need to compensate. What you want to do is reduce the intensity of the light falling on your CCD more than your camera recommends, by making the aperture wider, or by closing the shutter faster. So if your camera recommends 1/250 sec at f/8 after metering, try either 1/125 sec at f/8 or 1/250 sec at f/5.6 – it's similar to what you would do when bracketing a shot (see last month's issue).

Next month Trees, woods and forests: we show you five great ways to take better shots.

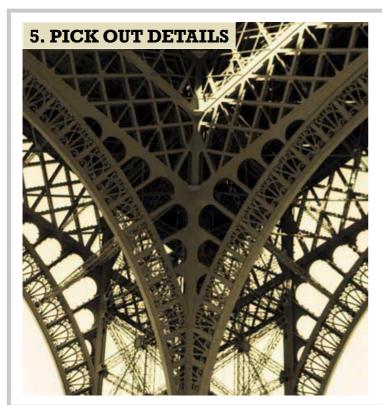
ONE CLICK FIX

Got converging verticals you don't want? Use Photoshop's Transform tool to pull them back into line

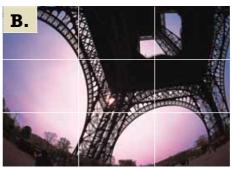
Five ways to shoot











ATTENTION TO DETAIL

Don't try to shoot the whole pattern or detail and focus on that instead. Be careful to expose for the whole picture, or you'll end up with a silhouette...

A. SILHOUETTE

Not that there is anything wrong with that, of course. Here's the same part of the Eiffel Tower but we've metered for the bright sky.

B. RULE OF THIRDS

Of course, you could try the rule of thirds to give your image a bit of extra compositional interest. Note how the bulk of the subject falls into a definite 'two-thirds' section of the grid, above.





Back issues

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MARCH 2004 Build your own home studio: replicate pro lighting effects, plus flashguns, reflectors backgrounds and light meters explained.



ISSUE 19 APRIL 2004 High-impact portraits. Improve techniques and get great results. Plus, interviews with Terry O'Neill and Adam Lawrence.



ISSUE 20 Shoot stunning landscapes: lighting advice, expert tips and more. Plus. Photographer of the Year revealed!



ISSUE 21 IUNE 2004

- IN THE MAG The secrets of star portraits: improve your pics with Hollywood techniques
- ON THE DISC Pseudo-IR, EROL 3 Small Store, movie tutorials



ISSUE 22 JULY 2004

■ IN THE MAG Improve your action photos! Easy techniques for wildlife and people shots, camera settings, plus pro sports photography



ISSUE 23 AUGUST 2004

- IN THE MAG Take brilliant people shots: light effects, technical tricks, poses and darkroom advice. Plus, the best summer photo locations
- ON THE DISC Stitcher 3.1



ISSUE 24 SEPTEMBER 2004

■ IN THE MAG Shoot dramatic landscapes! Take your best-ever summer scenes: the kit, the composition tricks and the editing tips ON THE DISC PowerProducer



ISSUE 25 OCTOBER 2004

- IN THE MAG Take your best-ever nature shots: get super-sharp closeups, darkroom tricks, lighting tips
- ON THE DISC Panoweaver 2.0
- FREE BOOK Adobe Photoshop **Enhancing Photos**



ISSUE 26 NOVEMBER 2004

- IN THE MAG Shoot high-impact night photos! How to take your bestever light trails and firework shots; get exposure right: capture vivid colour
- ON THE DISC My Cumulus 6; the ultimate plug-in collection



ISSUE 27 DECEMBER 2004

- IN THE MAG Take dramatic close-ups: essential SLR and compact techniques; shoot flowers and household objects; focusing, depthof-field and lighting tips
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WORTH OF GREAT KIT FROM JESSOPS



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RUNNERS



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Jessops has teamed up with Digital Camera Magazine, Digital Photo **Effects and Digital Camera Shopper** to give you the chance to win £1,000 worth of Jessops photographic products (for example, a new digital

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With over 260 stores nationwide, Jessops is the UK's biggest high street The company offers great value for money, high levels of customer service and the broadest range of photographic products available anywhere in the UK - whether for the beginner, keen amateur or the professional user.

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Review



■ Cameras ■ Accessories ■ Software ■ Comparisons ■ Lab tests ■ Buyers' guides

CAMERA WATCH Moving to SLRs Mark Harris asks whether an SLR is your next logical step The digital SLR market is about to get a fixed zoom lenses) have become lot more crowded, with the release of two competent. Their new, affordable cameras. Pentax is upgrading its *ist camera with a higher shooting speed and USB 2.0, while Konica Minolta is unveiling the Dynax 7D, complete with anti-shake CCD and 2.5 ide-angle 24mm eq inch LCD. Alongside Nikon's D70, Cand Ox and even 12x te EOS 20D and the ever-popular EOS 30 lso popping up. SLRs will there seems to be a dSLR to suit ever faster and more flexible but budget. But just as SLRs are getting longer look like an inevitable cheaper, 7MP and 8MP SLR-alike the savvy enthusiast. ario-Tessa Sony's new 7MP compact - th

INSIDE

84 SONY CYBER-SHOT DSC-P150 Have the sultans of style created a winner?

88 CANON POWERSHOT S70 Another step up the resolution ladder

90 KONICA MINOLTA DIMAGE Z3

What lies behind the Z3's enormous lens? 92 CASIO EXILIM EX-S100

Meet the smallest-ever digital zoom camera

94 SAMSUNG DIGIMAX V6 6 megapixels for a very reasonable price

96 PICK OF THE CROP A look at the latest photographic accessories

Six home photo labs tried and tested

THE UK's ${f MOST}$ **EXHAUSTIVE TESTS**

Kit is expensive. Which is why our camera reviews answer your questions and give clear verdicts, fast:

RE THE SPECIFICATIONS GOOD OR BAD? ARE THE SPECIFICATIONS GOOD OR BAD? In the Specifications table, you'll see the key features grouped and labelled GOOD, AVERAGE or POOR. We've done this because you want to know immediately whether a feature is good or not, relative to its competitors.

2IS THE CAMERA GOOD QUALITY?We take each of the four main camera characteristics and mark them out of 100. Anything over 70% is worth a look, 80% is a safe buy, 90% or over is excellent.

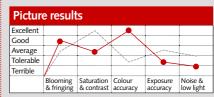
Features – the total specification
Optics – the lens quality and CCD characteristics Build quality – metal or plastic finish? Controls good/fiddly? Value for money – is the price right?

3ARE THE PICTURE RESULTS GOOD?
Our unique 'Picture results' diagram (below) shows how

well the camera resolves colours and detail, in relation to a comparable proven performer in its price range Blooming and fringing – do you see coloured halos around edges or points, or other errors?

Saturation and contrast – are high/lowlights contrasted?
Colour accuracy – do colours look lifelike, or dull and flat? Exposure accuracy – is bright/darkness compensated for?

Noise and low light – do pictures come out over-grainy in low-light conditions? Is the detail good?



4SHOULD YOU BUY THE CAMERA?
We rate the camera relative to its price band. It's the most definitive rating system anywhere - a review you can trust.

LOOK FOR THE LOGOS!

To help you, we've flagged essential content with these symbols:



price range

ON YOUR COVERDISC Means that you'll find test shots, contact details and comparisons

BEST BUY AWARD See this logo? It means

it's the overall best product you can buy in its



PHOTO QUALITY AWARD Produces excellent quality pictures, but it may just be edged from the Best Buy by other features



VALUE AWARD Solid, all-round camera for your money that may not be best in its class but contains the best features for the price





[1] Zeiss zoom The 3x zoom offers a very ordinary zoom range, but the image quality is good overall



[2] Metal finish This camera has excellent build quality and finish, to go with its high resolution

£290 7MP COMPACT

Sony Cyber-shot DSC-P150

Is the new 7-megapixel Sony the best point-and-shoot compact yet, or is the resolution race leading to ever-diminishing returns? **Rod Lawton** investigates...

or a while, the compact digital camera market seemed to plateau with 5-megapixel sensors. Then, earlier this year, 6-megapixel models hit the market and now, so close on their heels that 6-megapixel cameras are already passé, come a crop of 7-megapixel cameras.

Rivals £350-£400



Canon PowerShot S70 Price: £350 Megapixels: 7



Casio Exilim EX-P700 Price: £370 Megapixels: 7



Pentax Optio 750Z Price: £380 Megapixels: 7

Canon has two, with the PowerShot G6 and S70, Pentax has its new Optio 750Z, and Casio's quickly supplemented its 6-megapixel EX-P600 with the 7-megapixel P700.

All these, though, are rather serious cameras with price tags to match. The Sony P-150, by contrast, is aimed fair and square at the casual snapshot market and, found at about £300 when you shop around.

First impressions

The P-150 shares the rectangular, round-ended shape of other mid-range Cyber-shot models. It's an attractive enough design, but it's also very familiar by now, and only the numbers on the front distinguish this camera from its many predecessors.

The P150 isn't especially small by today's standards, but it is very well made. The aluminium finish makes its price tag look all the more attractive, and its rounded corners do at least make it easy to slip in and out of your pocket.

It's pretty responsive, too. The start-up time is just 1.4 seconds, so you'll lose fewer 'grab' shots. The AF system works well. It slows down a bit in dimmer, indoor conditions, but as long as the light's bright enough for handheld shooting, the AF response is well up to speed. Shutter delay typically feels like half a second or less at normal focal lengths.

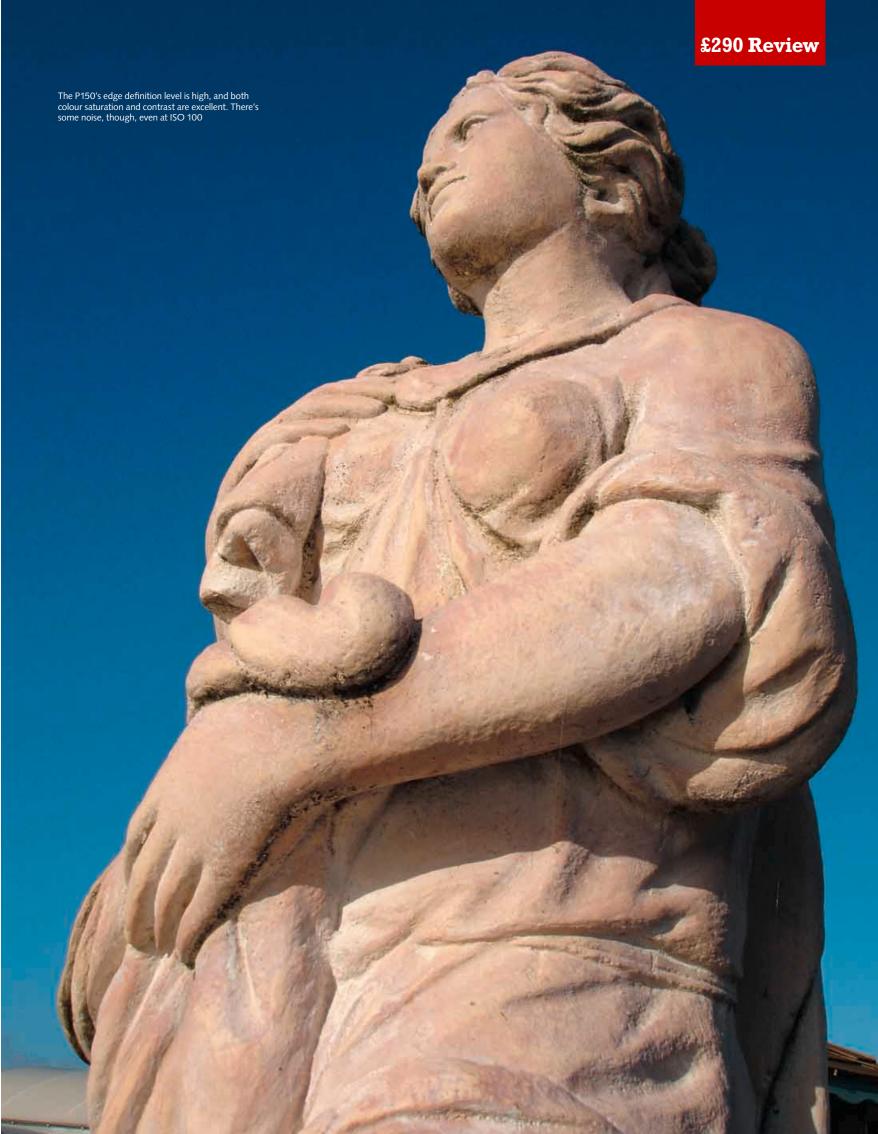
Controls and layout

The power button is quite small and recessed too, and could do with being easier to find when

you're in a hurry. The mode dial is also on the back. It's firm, with positive click-stops, but easy to turn with your right index finger and mirrored on the LCD.

The full auto mode is for snaps only, and pressing the Menu button offers only the drive setting - Normal, Burst and Multi Burst. If you want more control, you need to switch to the Program mode. Here, the menus offer EV compensation, Focus mode, Metering Mode, White Balance, ISO, Quality, picture effects (Off, Sepia, B & W), Saturation, Contrast and Sharpness.

It would be better if the EV compensation, ISO and white balance were a little more accessible via buttons on the camera, for example, but the Sony's menu system is quicker to





navigate than most. The menus run along the bottom of the screen and open upwards. As soon as you highlight an option, it's active - you don't have to press an 'OK' button to select an option - and the menus open wherever you last left them, which is useful for cancelling a temporary adjustment.

There are a couple of more advanced photographic options you wouldn't necessarily expect on a camera in this bracket. One is a live histogram display, activated when you press the Display button. The other is a Manual mode which lets you adjust shutter speed and aperture independently.

This is good in principle but a bit limited in practice because you only get two aperture settings two EV values apart - f2.8 or f5.6 at the wide-angle end of the zooming range, and f5.2 or f10 at the telephoto end.

Practicality

The zooming range on this camera is distinctly ordinary, corresponding to 38-114mm on a 35mm film camera. It's not too quick at getting from one end of its (modest) zooming range to the other, either.

Battery life is very good though, and if you want to make the

battery last even longer you can use the optical viewfinder instead of the LCD. It's quite easy to find with your eye, and while there is a fair degree of barrel distortion it's perfectly usable.

The final thing to note is the 32MB Memory Stick you get with the P150. First, 32MB doesn't go far with a 7-megapixel sensor (nine shots at best quality), and second, you're committing yourself to a card format that few other manufacturers use. In buying the P150 you'll be tying yourself into the Sony brand, especially if you also invest in some larger capacity Memory Sticks to go with it (you

won't get far with this camera if you don't). That might suit Sony, but it's hardly likely to suit you.

Picture quality

Enough about the technicalities - what are the Sony's pictures like? In a word, excellent. What strikes you first is the contrast and colour saturation, but also the colour fidelity. Colours aren't just strong, but are also extremely naturallooking. Whites really do come out white, producing very cleanlooking colours.

The exposure accuracy is the next, surprise. In the vast majority of conditions, the auto-exposure

Key camera controls



The Sony's mode dial lets you choose between full auto mode, programmed (with some manual control), scene modes and manual exposure.



Navigational controller

The navigational buttons enable you to set the selftimer, flash mode, macro mode and review the last shot you've taken.



InfoLithium battery

Sony's InfoLithium battery holds enough power for around 300 shots with the LCD on. That's good in a camera

Specifications

CONTACT		
RRP	£400 (£290 street price)	
Phone	08705 143723	
Web	www.canon.co.uk	
KEY FEATURES		
Exposure controls	P/M and scene modes	Semi-serious
Lens	Carl Zeiss	Good
Shutter delay	Approx. 0.5sec	Competent
Video	640 x 480 with sound	Good
Battery life	320 shots (LCD on)	Very good
PHOTOGRAPHIC	C	
Sensor	7.2-megapixel, 1/1.8-inch 7.4MP CCD	
Optics	Carl Zeiss 7.9-23.7mm (38-114mm equi	valent) f2.8-5.2 3x zoom
Metering	Multi-pattern, spot	

Focus	Multi-point AF, Centre-AF, Single-shot, Continuous AF, Manual presets, 6cm minimum in macro mode
Monitor	1.8-inch, 134,000 pixels LCD
AE compensation	+/-2EV in 0.3EV steps
Flash	Auto, on, slow, off, red-eye (via menus)
EXTRAS	
Video output	None
Movie recording	None
Other features	PictBridge compatible
PHYSICAL CHAP	RACTERISTICS
Memory	32MB Memory Stick
Batteries	Lithium-ion rechargeable, NP-FR1
Dimensions	108mm(w) x 52mm(h) x 27mm(d)
Transfer	USB



[3] LCD display The LCD display is a good size at 1.8 inches), and is bright and colourful



[4] Menu system Sony's menu systems are always clear and auick to use







[5] Power button The start-up time's 1.4 seconds, so there's less risk of missing those 'grab' shots



[6] Shutter release The AF system is

quick in good light, but slows indoors

"A very good buy if you want a combination of style, performance, build and image quality"

system produces bang-on results without the need for the exposure lock or EV compensation control. The only exceptions are conditions which would fool any camera bright, overcast skies in landscape shots and inherently light or darktoned subjects.

Visual sharpness is extremely good too, and at first sight the Sony's 7-megapixel sensor does look like a useful advance over 5-megapixel models. Up close, though, textural detail can become lost in a 'mush' of colour, and white or bright objects can produce

magenta or blue colour fringing. The Sony's no worse than most other compact digital cameras for this, though, and overall the picture quality is really very good.

Rivals and conclusions

So, given its very attractive price, does this make the Sony P150 a must-have in the mid-range digital camera market? It's certainly a very good buy if you want a combination of style, performance, build and image quality without breaking the bank. However, you have to wonder if the 7-megapixel

sensor isn't slightly wasted in a camera which lacks serious levels of photographic control. A 5-megapixel model might do almost as good a job for less of your hard earned money.

It's disappointing too that the P150 seems to offer no obvious advance over other Cyber-shots except in sensor resolution. The design is the same, the lens focal range is the same, the controls and menus are the same – this camera is only half-new. There's more resolution, yes, but nothing else.

The P150 remains a decent choice for those who want sheer resolution without the photographic complexity of cameras like the Canon S70. It delivers very good results with very little user input. ■

Performance



Outdoor shots

Pro: Near foolproof auto-exposure system Con: Poor fine textural detail (grass, distant trees)



Indoor shots

Pro: Colour and saturation in gloomy lighting Con: Noise levels become marked above ISO 100



Skin tones

Pro: Good white balance control Con: Can burn out highlights on clothing

Verdict

Camera quality	
Features	72%
Optics	76%
Build	91%
Value for money	80%



Overall score



"The Sony delivers very good colours and contrast, though there is some colour fringing"





[1] Optics A maximum zoom length of 100mm gives improved the optical quality



[2] CCD 7 megapixels on a CCD of 1 1/8-inch is impressive

£369 7MP COMPACT

Canon **Powershot S70**

The S70 marks another big resolution step for Canon, but how will the camera handle the extra file size? **Matt Henry** reports

espite a number of the big boys pledging to give up the megapixel marathon in favour of focusing on image quality issues such as noise, lens resolution, chromatic aberration, and dynamic range, here we have what seems like another escalation in the resolution war.

Rivals £250 – £400



Fujifilm Finepix F700 Price: £250 Megapixels: 6



Pentax Optio 555 Price: £280



Casio EX-P600 Price: £368 Megapixels: 5

Megapixels: 5

Canon has crammed a 7-megapixel sensor into its ultra-compact, the Powershot S70, which boasts sensor dimensions of just 1/1.8inch. Common sense tells you that the laws of physics might just suggest that something's got to give, especially when you consider that sticking 8 megapixels into the altogether bigger 2/3-inch sensor did little to improve resolution in real terms, and only brought extra problems with noise (see Sony's DSC F828, Nikon's 8700, Canon's Powershot Pro 1 et al).

But then we're still dealing with what's essentially an emerging technology, so better to give Canon the benefit of the doubt and hope that some behind-thescenes imaging advancements have made 7MP and 1/1.8-inch a winning combination. The

S70 certainly looks every inch the finalist - the sleek, black magnesium-alloy casing makes the camera feel exceptionally tough for a mid-size compact.

Checking the features

Feature spec is comprehensive: there's a RAW option for bestquality images, which is one feature that can't be taken for granted at this price point and, even rarer, the option to switch back from JPEG to RAW format in playback mode.

Other features worth mentioning include centreweighted and spot as well as evaluative settings for metering; nine manually selectable AF points; macro shooting as close as 4cm; as well as manual white balance.

A maximum zoom length of 100mm might be limiting for some, but then optical quality is likely to be that much better for the given size restriction.

Cramming 28-300mm odd is more than often a recipe for chromatic aberration, barrel, pincushion distortion, and countless other lens defects. A minus point zoom fanatics are often willing to swallow, but thankfully the S70 makes none of these concessions.

The S70's layout is a product of Canon's much-praised sensibilities for logic and speed of use. There's not the room for placing shooting controls on the backplate, so instead you get a function button that brings up a sub-menu with options - never as fast as dedicated buttons, but it still works okay, albeit for the fact that a half press of the shutter doesn't switch it off.

Key camera controls



thumbpad

This thumbpad is as well designed as they come. It has a superb metal finish, sensible spacing and a satisfying click on the selection



Function button

Press to bring up a function submenu, which gives you quick access to shooting parameters such as white balance, ISO, image quality and exposure compensation.



Centre set button

This lets you make selections in the menu system, in playback mode, and enables you to toggle between auto AF, centre AF, and selectable AF points.

Specifications

-		
DETAILS		
RRP price	£500 (£369 street price)	
Phone	0870 241 2161	
Web	www.canon.co.uk	
KEY FEATURES		
Exposure controls	C, M, AV, TV, P, auto, scene modes	Comprehensive
Lens	Canon	Commendable
Shutter delay	1 sec	Average
Video	640 x 480 at 10fps for 30secs with audio	Good
Battery life	140 shots	Poor
PHOTOGRAPHIC	C	
Sensor	7.1 megapixels	
Optics	2.8-5.8/8.0, 28-100mm	

Focus	9-point auto, or manually selectable			
Metering	Evaluative, centre-weighted, spot			
AE compensation	+-2.0 in 0.3 steps			
Flash	Auto, on, off, manual, red-eye on+off			
EXTRAS				
Video output	Yes			
Movie recording	640 x 480, 10 fps for 30secs			
Other features	PictBridge compatible			
PHYSICAL CHAR	ACTERISTICS			
Memory	CF I + II (32MB included)			
Batteries	Lithium-ion rechargeable			
Dimensions	114 x 57 x 39 mm			
Transfer	USB			



[1] Exposure mode control Gives you fast access to the usual exposure mode suspects



[2] Shutter release Half press locks the autofocus, and full press trips the shutter







[3] Playback A single button taking you straight to

playback mode



[4] Display button This scrolls through: info on, info off, and display off

"It exhibits the sort of sluggishness you'd expect from first or second generation digital compacts"

At least it's still possible to shoot and view your images with the function menu switched on and neatly tucked to the side, which means you can play with the exposure compensation setting and see how things look immediately with playback preview, changing again if things aren't as you'd like. And the same goes for white balance - it almost makes up for the missing dedicated buttons. The main menu houses all of the tool options, and is well specced and very well laid out.

Where the S70 does start to come unstuck is with performance. It exhibits the sort of sluggishness you'd expect from first or second generation digital compacts.

Start-up time isn't a disgrace at three seconds, but playback is appalling - up to two seconds to move from one image to the next, which is inexcusable.

A product of the extra file size involved for sure, but enough of a hassle to easily outweigh the benefits of those extra couple of MPs. Shutter lag isn't so bad but still present in large enough amounts to annoy, such as the time involved to move between playback and recording modes, and the time it takes the AF to lock.

And while the metering systems comes out around the average mark, the AF system falls hopelessly behind, regularly failing to lock onto subjects in the centre

AF point with no good reason at all that we could tell.

Great optics

Praise needs to be given for the optics. Chromatic aberration is rarely noticeable, which is a triumph for a digital compact; and RAW images appear reasonably crisp. There's a small amount of barrel distortion at the widest angle, but nothing to really spoil the party.

Noise levels aren't fantastic at anything above ISO 50, but no where near as bad as expected - testament in part perhaps to Canon's DIGIC image processor. The resolution increase for the sensor size does seem to have brought no significant drop in image quality elsewhere either - dynamic range is as expected for a compact with little evidence of blooming. A shame, then, about the camera's sluggish speed... ■

Performance



Outdoor shots

Pro Fairly decent metering in evaluative mode Con Some lens flare in direct sunlight



Indoor shots

Pro ISO 400 is fast enough for some indoor work Con Auto white balance didn't neutralise tungsten



Skin tones

Pro Good tone with the fault image settings Con AF inaccuracy makes sharp focus difficult

Verdict

Camera quality							
Feature	es				89%		
Optics 8					88%		
Build					89%		
Value f	or mon	ey			70%		
Pictur	e result	S					
Excellent	•	•					
Good Average			•				
Tolerable Terrible							
		Saturation & contrast		Exposure accuracy	Noise & low light		
Can	on \$70 ——	& fringing & contrast accuracy accuracy low light Canon S70 Typical £350 compact: Fuji F700 Z. — —					

Overall score

"A well made camera with decent optics and image quality. Is let down by a fatal lack of responsiveness"





[1] Lens Takes a few seconds to wake up when turned on



[2] **Grip** The right-hand grip is too angular to be really comfortable

£262 4MP SUPER-ZOOM

Konica Minolta Dimage Z3

The Z3 offers a huge lens and manual control at a bargain basement price - but every silver lining has a cloud, reckons **Mark Harris**...

here's something very seductive about the idea of a super-zoom - a single camera with a wide enough focal length range to replace an SLR and a bag full of lenses, all for the cost of a decent tripod. Of course, there are compromises to be made and these are obvious

Rivals £300-400



Kodak DX7590

Price: £380 Megapixels: 5



Panasonic Lumix FZ20 Price: £400



Canon PowerShot S1 IS Price: £300 Megapixels: 3.2

from the moment you pick up Konica Minolta's 12x digital snapper. The Z3 uses silver plastic and fake chrome like it hadn't already gone out of fashion and the design can only be described as Star Trek aspirational.

The Z3 feels dangerously light and flimsy until you feed it four AA batteries, whereupon it actually balances quite well, even allowing one-handed operation. Although the controls are generally located in the right places, the build quality is such that using the Z3 is never less than awkward. The righthand grip is far too smooth, the zoom, flash, macro and four-way navigation buttons are plasticky and even the large mode dial clicks round hesitantly.

Start-up time is average for a budget camera, at around three seconds, although the Z3 gets better in use. Once the lens has extended, all zooming is internal, swift and silent, with the only noise being a hissing sound as the Z3 tries to focus. This can be a protracted affair, especially in low light, so you'll appreciate the short processing time and impressive continuous drive modes (up to 2.5 frames per second). These include progressive (final five frames) and exposure bracketing options.

Nice features

A main selling point of Konica Minolta's Z range has been a unique flip-up mirror system that uses a single LCD to provide both the main screen and the EVF. This means you get a large, bright EVF image but a 1.5-inch main LCD that seems to get smaller with each

incarnation. Obviously, it keeps the price (and weight) down but be prepared for some squinting to make out the smaller icons and the miniscule real-time histogram.

If the Z3's design and build quality feel cheap, you can't say the same for its photo features. There are four main scene programs (portrait, landscape, sports, sunset), plus a neat Auto mode that automatically chooses between them depending on your subject.

Click past these and you'll find aperture and shutter priority as well as full manual exposure modes. These work well, with the LCD screen giving a visual indication of over- and underexposure. You can also select evaluative, centre-weighted or spot metering.

Key camera controls



Mode dial

Nice and large but too close to the other controls for comfort. You can also reprogram the flash button to another function.



Flash

None of your fancy spring-mounted flashes here, just pull it up to deploy. At least the hotshoe comes with



4-way navigation

This is plasticky and flimsy. Also, the righthand menu key is too near the protruding grip for our liking.



Specifications

DETAILS		
RRP	£275 (£262 street price)	
Phone	0208 751 6121	
Web	www.minoltaeurope.com	
KEY FEATURES		
Exposure controls	Auto, Program, Av, Tv, Manual, Scene	Good
Lens	Minolta GT APO, 35-420mm equiv (12x)	Below average
Shutter delay	0.75 second	Average
Video	Up to 640 x 480 pixels, 30fps, with audio, no	limit Unbeatable
Battery life	170 with alkaline, 320 with NiMH (CIPA)	Good
PHOTOGRAPHIC	C	
Sensor	4.0 megapixels	
Optics	2.8-4.5/8.0 35-420mm equiv	

Focus	Auto (multi-zone), manual, continuous, full-time AF, 1cm macro
Metering	Evaluative, centre-weighted, spot
Monitor	1.5-inch colour LCD
AE compensation	+/- 2.0 in 0.3 steps, bracketing
Flash	Auto, on, off, auto red-eye, slow synch, hotshoe
EXTRAS	
Video output	(NTSC/PAL)
Other features	PictBridge compatible
PHYSICAL CHAR	ACTERISTICS
Memory	SD, 16MB supplied
Batteries	4 x AA cells
Dimensions	109mm(w) x 80mm(h) x 84mm(d)
Transfer	USB 2.0



[3] View lever The flip up to electronic viewfinder mode works well



[4] LCD screen 1.5 inches is on the small side nowadays. especially to view small icons







[5] Zoom control Slide from side to side to zoom but it's not very solid



[6] i+ button Hit this to change the information displayed, including real-time histogram

"If the Z3's design and build quality feel cheap, you can't say the same for its photo features"

Focus options are good too, including a stunning 1cm supermacro mode, a choice of focus zones (all clustered around the centre) and basic manual focusing. For sports or wildlife photography, you can set the autofocus to the similar (and similarly ineffective) Continuous and Full-time AF modes, both of which need some coaxing from half-pressing the shutter to work properly. The image stabiliser isn't that impressive either, and is certainly no patch on Panasonic's Mega OIS system.

A useful feature more often found on expensive cameras is the ability to change the flash button to control white balance, drive,

colour, focus or sensitivity instead. The flash itself is fully manual to deploy and delivers a strong burst of light, with good coverage at the wide-angle lens setting.

Movies and stills

Also of note is the Z3's exceptional movie mode. With a frame rate of 30fps, VGA resolution and no time limit on clips, the Z3 can compete with tape-free camcorders. Movies are bright and crisp, sound is clear enough and you can even use the optical zoom during filming. The Z3 is head and shoulders above most camera movie modes.

When it comes to stills, the Z3's main selling point is also its main weak point. Although the huge

zoom range of the GT APO lens opens doors photographically, enabling great portraits and sports photography, it's below par optically. There is little fine detail visible and images can become quite soft at the edges. Chromatic aberration (purple fringing) is noticeable in almost all photos shot at the telephoto end of the zoom, and we also noticed some lens glare.

Despite this the Z3's performance has much to recommend it. There is little distortion in the lens and no sign of vignetting at either extreme. Auto exposure is wonderful and noise is fine for a four-megapixel chip. Colours are superbly reproduced, balancing smoothness with depth. There's no confusion or fringing between even the brightest tones. If you accept its build quality and optical limitations, there's plenty on the Z3 worth exploring.

Performance



Outdoor shots

Pro Stabilised long lens for daylight telephoto Con Some noise even in this ISO100 image



Indoor shots

Pro Perfect white balancing and rich colours Con Focus can be slow



Skin tones

Pro Fantastic back-lit exposure with rich pinks Con A touch soft in close-up

Verdict

Feature	es				88%
Optics				72%	
Build				70%	
Value for money					90%
value i	OI IIIOII	Су			<i>J</i> 0 /
	e result	,			J 0 7
		,			70 /
Pictur		,			50,
Pictur Excellent		,			307
Pictur Excellent Good		,			0
Pictur Excellent Good Average		,			

Overall score



"Struggle past the cheap lens and there's a competent super-zoom to be found here"





[1] Lens The ceramic lens aids miniaturisation but doesn't deliver obvious

optical benefits



[2] Finish
The S100 is tiny and beautifully made, but then so are many of

the Casio's rivals

£235 3.2MP ZOOM

Casio Exilim EX-S100

It's the world's smallest zoom digital camera but does that also mean it's fiddly to use and takes poor-quality shots? **Rod Lawton** thinks maybe not...

he Exilim S100 is the world's smallest zoom camera. Whether that's enough to justify paying over the odds for 3.2 megapixels of resolution is another matter. Small and compact it might be, but the Exilim's size advantages over its rivals are equally slim.



The Casio is going to have to do a little bit more in order to justify its premium price tag. Ideally, the S100 will also be beautifully made, wonderful to use and capable of exceptionally good results.

Size and usability

Well, it certainly is small. Its frontal area is similar to that of cameras like Pentax's Optio S40, but the Casio is impressively slim. Again, though, the differences are slight, so the practical advantages of its smallest-ever dimensions may be equally small.

But there's no doubting this camera's build quality. The metal body feels weighty and solid, with no hint of creaky plastics and badly-fitted joins anywhere. Casio might be better known as an electronics manufacturer rather

than a camera maker, but none of the big photographic names produce a camera that beats – or even matches, dare we say – the quality feel of this one.

Good though it is so far, the Casio still has some way to go to justify its price tag. How about the controls? What are they like?

This is an area where Casio has stolen a march on many of its rivals. For a start, the twinned Play and Record buttons on the back power up the camera in whichever mode you want. Simple or what? Better still, the start-up time's no longer than a second, so you're ready to shoot at any time.

Then there's that big 2-inch LCD, on a camera where you'd be surprised to find anything larger than a 1.5-inch screen. Despite its size it only has 85,000 pixels, a

good deal less than the 120,000-130,000 pixels found on most other cameras, giving the display a slightly granular look.

There's a four-way navipad with a central OK button, a menu button and a display button. Apart from the zoom buttons, that's all there is on the back.

This does mean some compromises, though an intelligent control layout makes the most of the space there is. The navipad, for example, controls the focusing mode, flash mode and another option of your choice.

Clever features

The focus modes are where the Casio is surprisingly sophisticated. As well as the default area/spot AF system, you can also select Macro mode, infinity focus, manual focus

Key camera controls



Play and Record buttons

Press the Play button to start the camera in playback mode to browse through saved images and the Record button to start shooting.



Navipad

The navigational pad makes menu navigation simple. In Record mode, pressing up cycles through focusing modes, while pressing down selects the flash.



Menu system

With limited space for external controls, most of the functions can only be activated via the menus. These include the camera's 23 Best Shot modes.

Specifications

•		
DETAILS		
RRP	£350 (£235 street price)	
Phone	0208 208 7838	
Web	www.casio.co.uk	
KEY FEATURES		
Exposure controls	Program AE and Best Shot modes	Handy
Lens	Fujinon	Average
Shutter delay	0.5sec or less	Quick
Video	320 x 240 with sound	Basic
Battery life	180 shots (CIPA standard)	Decent
PHOTOGRAPHIC	:	
Sensor	3.2-megapixel, 1/3.2-inch 3.3MP CCD	
Optics	4.8-13.5mm (36-102mm equivalent) f4.0-6.6 2.8	3x zoom

Focus	Auto, manual, 17cm in macro mode
Metering	Multi-pattern
Monitor	2.0-inch, 85,000 pixels
AE compensation	+/-2EV in 0.3EV steps
Flash	Auto, on, off, red-eye, slow (in Best Shot mode)
EXTRAS	
Video output	No
Other features	Customisable Best Shot modes
PHYSICAL CHAR	RACTERISTICS
Memory	9.3MB internal, SD card slot
Batteries	Lithium-ion rechargeable, NP-20
Dimensions	88mm(w) x 57mm(h) x 16.7mm(d)
Transfer	USB



[3] Display The display options have a live histogram, RGB channels and luminance histogram



[4] **LCD** The S100's 2-inch screen is bigger than average, though it has only 85,000 pixels







[5] Power switch The S100 can shoot in a second if you press the record button or the power button



[6] Shutter release

Stop lag with manual or infinity focus, or the 'pan-focus' mode

"Small and compact it might be, but the Exilim's size advantages over its rivals are equally slim"

and pan focus (0.6-5.9m). These extra fixed-focus modes enable you to eliminate lag altogether when shutter timing is more important than precise focusing.

The Casio's Best Shot modes are equally interesting. These are like conventional scene modes, but more numerous and, in many instances, more sophisticated. There's the Coupling Shot mode that lets you get both parties in the frame when there's only two of you in the first place, and the Pre Shot mode which lets you frame a scenic shot then hand the camera to a passer-by to take a picture of you against your backdrop. Both superimpose the first shot on the LCD when you're framing the

second to help the shots match up. The White board mode is especially clever. It not only adds exposure to compensate for a, well, white board, but also attempts to correct modest amounts of perspective distortion from sitting at a slight angle to the board.

The only problem with these Best Shot modes is that you have to use the menus to switch from the normal Snapshot mode. Second that with 23 of the things to choose from, and by the time you've scrolled to the one you want you've missed the picture.

In the right conditions, the S100 produces accurate colours and terrific saturation. The exposure system is pretty accurate and

reliable too. But the super-slim design makes camera shake an ever-present danger in poor light, and even when there's no shake present the level of definition produced by the tiny sensor is only average. The ceramic lens may be a technological breakthrough, but its advantages relate more to design and compactness than optical quality, if our results are anything to go by.

Concluding thoughts

The Exilim EX-S100 is very impressive as a piece of design, and there's no doubting the quality of its construction and finish. But while it may be the smallest zoom camera you can buy, it's not the smallest by much, and there are far cheaper cameras around which take better pictures.

With that in mind, the Casio would have to be a lot cheaper to be genuinely tempting.

Performance



Outdoor shots

Pro Good colour, contrast and decent saturation Con Poor fine detail in textured vegetation



Indoor shots

Pro Strong, vibrant colours suit still lifes Con Limited maximum aperture



Skin tones

Pro Smooth tones, good exposure accuracy **Con** Indifferent detail in eyelashes

Verdict

Came	Camera quality						
Feature	Features						
Optics					62%		
Build					93%		
Value f	or mon	ey			40%		
Picture	e result	S					
Excellent	<i>[</i>						
Good	/			-			
Average	/•						
Tolerable	//				•		
Terrible	/						
		Saturation & contrast		Exposure accuracy	Noise & low light		

Overall score



"Wonderfully made and good to use, but picture quality is average and you don't even get a memory card"





[1] Lens The 3x zoom lens will cover up to a 38-114mm equivalent zoom range



[2] Flash The wide body allows the flash to be placed away from the lens,

cutting down red-eye

£220 6.1MP COMPACT

Samsung Digimax V6

Samsung's top-of-the-range snapper offers 6 megapixels at a price where we expect five, but, asks **Shaun Marin**, should the competition be afraid?

amsung is still a relatively minor player in the digital camera world, but a few more models with specifications like those on offer with the Digimax V6 could find the Korean brand at the forefront of people's minds. As is often the way with Samsung, the company currently

Rivals £200-300 erdicts See page 105



Kodak DX7630 Price: £208 Megapixels: 6.1



FujiFilm Finepix F710 Price: £294 Megapixels: 6.2



Casio Exilim EX-P600 Price: £298 Megapixels: 6

holding the record for the world's biggest plasma screen (80 inches if you must know), much of the effort has gone into the headline features. In this case it's the 6.1 megapixels of resolution and a Schneider lens that immediately turns your head, especially as it comes at an asking price where 5-megapixel compact cameras still look like good value.

Although it may seem a trifle odd to have a snap'n'shoot camera boasting such high resolution, there's obviously a motive to the madness, even beyond the pure features-to-the-pound extravagance. At a time when mobile phones are incorporating 1-megapixel cameras in the UK, and 2 or 3 megapixels in the Far East, Samsung is obviously convinced that the brand that will

win out in the compact camera category will have to stay one step ahead of the mobiles

Well constructed

Whatever the plan, Samsung has certainly got the build of the V6 right. The greyish hue to the casework is a refreshing change from the brushed silver finishes of the competition, and the camera feels solid in the hand, and is big enough to limit camera shake except in dramatically failing light.

The flash is off to one side, and the longish body allows it to sit away from the lens. While there's red-eye reduction available, we found that the couple of times we forgot to press the button to engage it, the results didn't suffer too badly anyway. The one major downer about the design is the

LCD viewing screen, which at a piddly 1.5 inches across isn't exactly what we've grown accustomed to of late. It's not only a bit small for reviewing images, but it's also too small for using when framing shots - a big minus mark for general usability.

It's a shame, because the back panel of the V6 also features an intuitive and well laid-out system of buttons, rocker pads and dials, which may look a tad daunting at first but soon becomes second nature. These include a rather neat Navipad (as seen on Samsung's U-CA 4 in issue 26), which allows you instant access to important controls such as self-timer, macro and flash. A neat function enables the camera to remember the last setting for flash, so if you're taking pictures at night you don't need to

Key camera controls



Menus

Using the Navipad fourway controller, you can easily customise the V6's menus to suit yourself. Menus are displayed in 256 colours for maximum visibility



Power options

The Samsung is flexible when it comes to power. You can either use the supplied rechargeable 1,400mAh Lithium ion battery, or two standard AA cells in emergencies.



Zoom controls

The 3x Schneider Kreuznach lens is a bit jittery in use. There are few distortion or fringing problems but images could be sharper.

Specifications

RRP	£300 (£220 street price)	
Phone	01932 455 300	
Web	samsungcamera.co.uk	
KEY FEATURES		
Exposure controls	Auto, Program, A/S/M, MySet, Scene, Night Scene	Good
Lens	Vario Plan Schneider Kreuznach	Average
Shutter delay	Three	Poor
Video	640 x 480, 30fps, 15fps, audio	Good
Battery life	360 images	Good
PHOTOGRAPHIC		
Sensor	6.1 megapixels	
Optics	2.7 – 4.9 / 38-114mm equiv	

Focus	Auto (multi-zone, spot), manual	
Metering	Multi, spot	
Monitor	1.5-inch colour LCD	
AE compensation	+/- 2EV in 0.5 steps	
Flash	Auto, on, off, red-eye, slow synch, Fill-in-Flash	
EXTRAS		
Video output	(NTSC/PAL)	
Other features	PictBridge	
PHYSICAL CHARACTERISTICS		
Memory	SD, 32MB supplied	
Batteries	Rechargeable (3.7V Li ion) or 2 x AA	
Dimensions	106mm(w) x 55mm(h) x 38mm(d)	
Transfer	USB 1.1	



[3] Navipad The navipad enables quick access to the flash, self-timer, macro and annotation options



[4] LCD screen The 1.5-inch screen really is a little bit small, making it hard to check focusing







[5] Power button You need to hold the button in the on position for half a second to power up



[6] Shutter release

You need to really press down hard on this sluggish button

"Colour reproduction is top notch for such an affordable camera, with skin tones faring particularly well"

keep on selecting it every time you power up.

The zoom is also controlled from the back panel, it manages to get into the heart of the action and focusing on automatic is quick and generally pretty accurate.

The V6 is occasionally frustrating when you get caught unprepared; by the time the lens pops out and you are ready to shoot, all but the most posed of 'snap' shots would be well over. It feels like about ten seconds, but in reality it's actually close to four, which is still too long.

Another disappointing time factor comes after you take an image - the higher the quality, the longer it takes to write to the card. We can accept that, but the delay

here really is a bit on the long side. There's more drag factor when it comes to moving images between the camera and your computer as it uses USB 1.1, instead of the speedier 2.0.

Great resolution

The V6 stores pictures to a supplied 32MB memory card, which you will obviously need to upgrade if you are planning on shooting at the quality offered by the 6.1 megapixels. While SD cards aren't the cheapest memory option, they are readily available and prices are dropping all the time.

So far so good, but as we well know, image quality is about more than just about megapixels. Let's

start with the good stuff: colour reproduction is top notch for such an affordable camera, with skin tones faring particularly well. Outdoor scenes also come across naturally and on the surface there is a good degree of detail recorded by the CCD.

However, blow the pictures up, and you'll be hard pushed to convince someone that they were looking at a 6-megapixel camera rather than a 5 or even a top-notch 4MP camera. There's a hint of softness and blurring to the picture that suggests the money has been spent on recording the image rather than processing it.

Don't get us wrong, the V6 is far from being a bad camera. It's a very clever little beast, with plenty of features, including that whopping resolution. However, a tendency towards softness and a few design quirks stop us from recommending it completely.

Performance



Outdoor shots

Pro The V6 is good at picking out strong blues Con Camera shake is a problem in low light



Indoor shots

Pro A long exposure to shoot in low light
Con The flash takes three seconds to recharge



Skin tones

Pro Skin tones look good, and hair is pretty sharp Con Action is too slow to hold children's attention

Verdict

Camera quality	
Features	80%
Optics	70%
Build	80%
Value for money	78%

Picture results					
Excellent					
Good	,	-		-	
Average	/				
Tolerable	/				
Terrible	/				
		Saturation & contrast			Noise & low light
On test: Samsung V6 — Typical alternative: Fujifilm F710 — —					

Overall score

"The camera offers good value for money, but soft images and slow response times let the features down"

ONE TO WATCH

Canon Pixma ip5000



Price: £175 Tel: 0800 616 417 Website: www.canon.co.uk

Try to imagine a droplet of ink that's precisely one millionth of the size of a single raindrop. Well, that's the volume of liquid that

makes up a single picolitre of

small as one picolitre is the

ink, and having an ink droplet as

big claim to fame of Canon's brand new Pixma ip5000 Bubblejet printer.

The claim in this case is more than mere PR hyperbole - the ultra-fine printhead of this A4 colour printer delivers amazingly life-like photos. This is slightly surprising given the fact that the ip5000 uses just three coloured inks instead of the more usual

five found on most serious photo printers. However, the ip5000's secret weapon is a second black ink that provides astonishing gradation of tones and delivers a photo image that is easily the best of any three-ink printer we've seen before.

As well as offering excellent photos, the ip5000 can handle regular text and will even print images onto blank CD-Rs. This is thanks to a unique built-in CD tray, a handy feature that appears alongside two full-sized paper trays. Now you can keep regular paper in one feeder and photo paper in the other. Alternatively, you could keep A4 photo paper in one and 6 x 4 sheets in the other.

The Pixma's print times are excellent and the results when using Canon's ultra-glossy Photo Paper Pro are sublime, with very well balanced colours and an absence of grain - particularly in skies and skin tones. And because this is possible with just five inks housed in separate tanks, the ip5000 is relatively cheap to run and low 91% on wastage.



B+W Portrait & Family Set

Price: \$65

Tel: +49 (0)67 16010

Website: www.schneiderkreuznach.com Schneider Optics already has a long-established history in the photographic world, producing some of the finest filters on the market. Recently the company has expanded into the Photoshop filters arena with two offerings. The first of these is the Portrait & Family set, which comprises a simple set of six filters. Included in this selection is an excellent black and white converter and colour enhancer, a useful soft focus, and the warming and slightly bizarre Luna and Summertime filters.

The black and white converter offers a good solution for converting your images quickly without them becoming flat or losing detail, something that can happen all too easily through simple mode changes within Photoshop or by desaturating your colours. The Enhance Colours filter helps to lift flat images, giving the colours a boost in vibrancy, and lifts the subject from the paper when printed. The filters are well priced, and as a portrait set four out of the six are perfectly suited, and should improve any portrait photographer's toolset.







Photo Pro Paper



Iridius Actions 1.1

Price: £39.95

Tel: 01327 702828

Website: photoshop4photographers.co.uk Photoshop actions are a fantastic way of replicating functions that you regularly use, such as converting a selection of your images to black and white. Creating your own simple actions is easy enough, but the creation of more complex actions that are able to adjust levels and correct image flaws is beyond most people. On these occasions you wish you had a Photoshop expert looking over your shoulder to guide you through a few of those more tricky image improvements. Iridius Actions do exactly this job to 90% excellent effect.



FinePix waterproof case

Price: £135

Tel: 020 7586 5900

Website: www.fujifilm.co.uk Fuji's waterproof case for the F810 is an excellent option if you already own the camera or are on the lookout for something with underwater potential. The case is solidly built, and able to withstand the pressure at depths of up to 40m. Once secured inside with the dial lock, adjustments can be made to the camera's settings with the large buttons covering the exterior of the case, even when wearing neoprene gloves. If you're looking for a new camera with more than the usual features, the F810 waterproof case could help make the decision.



Exspect EX210

Price: £19.99

Tel: 01952 216166

Website: www.exspect.co.uk

Sometimes a product screams, 'Buy me!' The EX210 case from Exspect is one of those products. Everything, from the quality of the leather to the cleverly hidden magnetic catch, suggests that much care and thought have gone into this classy case, which is suitable for small cameras like the Olympus mju. The packaging is exquisite, and alongside the case are velvet inserts to help protect your camera and a lanyard. The threeway-to-wear system enables you to wear the case on a belt vertically or horizontally as well as around your neck.



Lexmark P6250 Photo All In One

Price: £169

Tel: 08704 440044

Website: www.lexmark.co.uk

Lexmark's attractive all-in-one device prints photos, and has a superb colour LCD for viewing images from the built-in memory card reader. In fact, there's everything you need: printer, scanner, copier, memory card reader, screen and even a PictBridge port. Now the bad news: the P6250 prints horrible photos. We couldn't get the nozzles to unblock on our test machine and the colours were appalling. The new Evercolor inks may boast up to 200 years longevity, but would anyone

want to look at them?

60%

Not just protective under the water...







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Home photo labs

Why trudge off to the high street to get your digital snaps? **Rod Lawton** reviews six home photo labs designed to be just as easy and a whole lot guicker...

e're told that most of our digital camera images are destined to stay forever as virtual images on our hard disk and never get printed. The printer manufacturers, not surprisingly, would like to change all that. Indeed, it's probably true that we do need to actually use, circulate and enjoy our digital photos more than we do. The problem in the past, though, has been that printing ordinary 6 x 4-inch snapshots has proved difficult, expensive and time-consuming.

The high street photo labs have been quick to spot this, and have supplemented their traditional film developing and printing processes with new digital printing facilities. These can be pretty costeffective too, but only if you're prepared to order dozens of prints at a time, and you don't mind coming in a day later to pick them all up.

So while the 'home photo labs' we're reviewing here might still cost a little extra to use on a printby-print basis, they're far faster and more convenient than the high street alternative.

All the printers on test can print 'borderless' 6 x 4-inch photos and to a quality that matches, or even exceeds, that which you can get from a conventional photo lab. What's more, they're all designed to be quick, easy and convenient to use.

However, they go about this in a variety of ways. We've selected a range of models to help you decide which one is likely to do the best job for you. Everyone has different needs, requirements and expectations, and the trick is to choose the . product that best meets them.



Canon Selphy CP-400



Features

The CP-400's dye-sub printing system adds an 'overcoat' layer to printed images for touch-dry handling straight away and greater resistance to damage. But while you can print direct from PictBridge digital cameras via cable, there are no memory card slots. The Canon's tiny desktop footprint is a bit misleading, though, because you have to allow for the clip-on paper tray at the front and the fact the paper has to exit and re-enter at the back for each colour 'pass'.

Quality of results

The Canon's printouts were good, with excellent fine detail rendition and no sign of any dot pattern close up, which is one of the advantages of dye-sublimation printers like this. Our test print did lack a little colour saturation in the red areas, though, and while the overall brightness level looked good, the shadow areas did tend to fade into a solid black. The print time for our test shot was 102 seconds, which is pretty good.

Inexpensive, but it takes up a lot of room

You could be forgiven for imagining that all colour printers these days were inkjets. That might be true for general-purpose models and even most photo printers, but a printing technology that disappeared for a while in the '90s has now made a comeback.

Back in fashion

Dye-sublimation printing works by heating inks on a transparent sheet so that they become gaseous and impregnate the surface layers of the paper. The inks combine far more subtly than the dots of colour squirted on to the paper by inkjet printers, and this results in smoother tones and subtler colour transitions.

For this reason, you can't directly compare the resolution figures for dye-sub and inkjet printers. Dyesubs work to a resolution of around 300dpi, but at this resolution they still produce results which rival or

"A printing technology that disappeared for a while in the '90s has now made a comeback"

Canon **BubbleJet i80**



Features

The BubbleJet i80 doesn't take up a lot more space overall than the Selphy CP-400 in use. It can print borderless photos up to A4 in size. There are no memory card slots, but it can print directly from PictBridge-compatible cameras via a cable. You can get an optional rechargeable Lithium-ion battery for printing on the move, and you don't need paper with special tear-off tabs for borderless 6 x 4-inch snapshots. The life expectancy of the tiny ink tanks might be a worry, though

Quality of results

The i80 produces super-vibrant photo output, and our test print time of 103 seconds puts it on a par with dedicated photo printers for speed. What's more, a borderless A4 photo prints out in just 232 seconds and the quality is awesome. If you look closely, there are hints of granularity in the image, but you'd have to be pretty picky to find this obtrusive. Colour saturation, detail rendition and overall brightness and contrast are superb.

High running costs are the sting in the tail

exceed those of the highest-resolution inkjets.

Dye-sub printing has another advantage. You can add an 'overcoat' or 'lamination' layer at the end of the dye-sub printing process to produce a tough, resilient surface that's far more durable than that of an inkjet print. The Canon Selphy CP-400 and Olympus P10 are dye-sub printers.

The cost of media for dye-sub printers has been an issue in the past, not least because the ink has to be supplied on bulky 'ribbons' in cassettes. However, if you buy an Olympus P10 you'll be able to get media packs for 100 photos for around £30. That's little more than the cost of prints on Epson's PictureMate.

The PictureMate, like the HP PhotoSmart 325, is an inkjet printer, and both are dedicated to 6 x 4-inch prints only. What's interesting in particular about the PictureMate is that Epson has made a bit of a departure in the way media supplies are sold.

Anyone who owns an inkjet will be familiar with that pain in the wallet you feel each time you see the ink levels falling. Manufacturers quote ink consumption levels for ordinary office documents, (typically at '5% coverage) per ink colour, but this is no guide to their life expectancy when printing photos, which is generally drastically shorter. This

Epson Picture*M*ate

Features

The Epson has got the lot: card readers for every memory card format currently in use, PictBridge compatibility for direct printing from your camera via cable, and a smart all-in-one media package that contains the inks and paper you need for 100 photo prints - they work out at around 27p each, so there are no nasty surprises waiting for you further down the road. What's more, Epson claims a print life expectancy of 104 years.

Quality of results

The Epson's results were close to being the best. Colours were neutral but saturated, and while the test print lacked the brilliance of the HP 325's, it was a bit more natural looking. The long-lasting pigment-based inks didn't show any of the 'flatness' often associated with these ink types, detail rendition was excellent and the sixink printing system yielded super-smooth tones with no trace of a dot pattern anywhere. The only drawback was the pretty slow test print time of nigh-on five minutes.

The Epson scarcely put a foot wrong

means you feel serious pangs of unease each time you press the Print button, especially if you've got dozens of snaps to print.

Epson's solution is to package an ink cartridge sufficient for around 100 photos, together with 100 sheets of photo paper, in a single box for around £27. You know exactly how much each photo is going to cost – 27p – so you can compare it directly with high street prices and there are no nasty surprises.

The HP 325 doesn't do this, though, so ink costs are a bit of an unknown. That's unfortunate because otherwise it's an excellent little printer.

Printing without computers

There's another interesting feature in the PictureMate and PhotoSmart 325. Both include card reader slots for every card type currently in use. You can take the card out of your camera, plug it in the slot and print and index sheet. Then you can choose the photos you want, enter their numbers and wait for them to drop into the out tray. The point of all this is that you don't need the computer to be on to do it. Come to that, you don't even need a computer.

There's another, slightly less obvious advantage to this. Both machines work as multi-format card readers

HP PhotoSmart 325



Features

It looks like a miniaturised plastic toaster, but the HP325 is still packed with card readers for every format in use, a full-colour LCD display, and PictBridge compatibility. You can even get an optional rechargeable battery and carry case for true portability. Unlike earlier HP printers, this one will print borderless images on true 6 x 4-inch paper (no tear-off tabs), and you even get a 'grey' ink cartridge for printing truly neutral-toned black and white images.

Quality of results

The brilliance of the 325's output takes you back at first, but closer examination reveals the printer software's image enhancement routines also produce some sharpening effects. The 325 will make even poor quality snaps look good, though its attempts at sharpening and saturation enhancement could occasionally go a little too far. Our test print time of 114 seconds is pretty good and makes the 325 comfortably faster than the Epson PictureMate, which is its closest rival.

Cheaper, faster, and smaller than most

87%

"Anyone who owns an inkjet will be familiar with that pain in the wallet you feel each time you see the ink levels falling"

for your computer. When the printer's connected, you can pop a memory card in the slot, and it appears as an external drive on your computer. You can then copy your photos across to your hard disk.

If your camera conforms to the PictBridge printing standard, you will also be able to print directly via a cable with some of these printers. However, having to tether your camera to the printer is less convenient than simply being able to take the card out. With card readers, you can carry on shooting while the printer's printing.

Alternative approaches

This idea has been used on more general-purpose printers, like HP's PhotoSmart 7450. Both the PictureMate and PhotoSmart 325 are limited, in that

HP PhotoSmart 7450



Features

You're getting an exceptional amount for your money with this printer, including card slots for all major memory card formats, borderless printing up to A4 and an included black cartridge to replace the photo cartridge for everyday printing. Maybe you can carry out all your printing tasks, from letters to photos, with just a single printer? The only worry is the cost of ink cartridges – the 'tri-colour' and 'photo' cartridges needed for photo printing cost, jointly, around £50-55.

Quality of results

The 7450's test prints looked slightly less vivid than those from the 325, and a little lighter. There's the same tendency to over-sharpen edges, which can perhaps be attributed to HP's Photoret IV printing technology. Viewed in isolation, though, the 7450's prints are still very good. Our test print time of 146 seconds was still quicker than the Epson's PictureMate, but a good deal longer than the 36-second print speed quoted by HP.

Great value for money and very versatile

you can't produce enlargements - you'll really need a second printer for this. The 7450, though, appears to offer the advantages of these two models, but also those of a conventional printer. It can produce photoquality output using a 'tri-colour' and 'photo' ink cartridge, or you can swap to general office/domestic use by taking out the photo cartridge and inserting a black cartridge (supplied with the printer).

It has the disadvantage that it's much bulkier than the PictureMate or PhotoSmart 325, but it does offer the card readers and direct printing from memory cards. The other printing option we've included is Canon's i80. At first sight, this might not look like a photo printer, but it's actually got some interesting and important advantages.

First, it's compact and portable. In use, it takes up little more space than Canon's own Selphy CP-400. Second, it can print borderless 6 x 4-inch photos like the rest, but it can also go right up to borderless A4 prints. Third, it's fast. Not so much with 6 x 4-inch prints, maybe, but its speed at A4 printing

So which of these photo printing solutions is the most convincing? Read our reviews and verdict to

Olympus P10



Features

The P10 has a smart silver/blue 'cuboid' design, and while it looks bulky when you first take it out of the box, there are no paper in/out trays to get in the way in use. You don't get memory card readers with this printer, which is a bit of a disappointment given the price, but it's PictBridge compatible. It laminates prints for extra durability, and the paper and inks are bought as a package, like the Epson's, so you know how much your prints are going to cost (around 30p each).

Quality of results

The P10's output is rich, deeply saturated and natural looking. The contrast is maybe a fraction high, tending to produce blocked-in shadow detail here and there, but the sharpness is excellent and the dye-sub printing technology means there's no visible dot pattern. Our text print time of 60 seconds made the P10 the fastest printer on test, and there's no fussing around with tabbed paper, either – this is a genuinely borderless dye-sub printer.

Cheap to run and produces superb prints



How Stuff Works

The How Stuff Works website is a mine of useful information. Visit http://computer.howstuffworks.com/inkjet-printer.htm to find out how inkjet printers work.

Epson Picture Mate

Phone 0800 220 546 Web www.epson.co.uk

We've included a couple of 'alternative' solutions for home photo printing in this roundup, which may suit users with specific printing requirements, but our overall brief was to find the best 6 x 4-inch photo printer, and we think we've found it.

The Epson PictureMate can be a bit slower than the rest, notably its chief rival the HP PhotoSmart 325. But the picture quality is excellent, the pigment inks should offer terrific longevity and – best of all – you know exactly how much your prints are going to cost. You can print from your computer, direct from memory cards, or from your camera via PictBridge.

As for the rest, the PhotoSmart 325 is cheaper, neater and faster. But the ink costs per print are a bit of an unknown, and it does produce somewhat oversharpened detail and slightly lurid colour.



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properly apparent.

Canon Selphy CP-400
Colours are slightly dull, especially red tones

Canon BubbleJet i80Fantastic results from a portable printer

Epson Picture/MateSlow, but you'll be very pleased with the colours

value is terrific.



photo output

HP PhotoSmart 325
The hyper-real colour rendition is striking

HP PhotoSmart 7450

Not quite such good output quality as the HP325

Olympus P10
Just about the best-quality results of all the printers

HOW WE TESTED

The first thing you look for in a photo printer is output quality. This consists of colour saturation, colour fidelity, contrast and fine detail rendition. It's no use having strong colours if they're hopelessly inaccurate, and while good contrast produces punchy looking images, too much can sacrifice shadow or highlight detail. Fine detail is important, too, but these days all photo printers are so good that your main problem's going to be finding a digital camera that matches up to them. Tonal smoothness is the other major factor. Normal four-colour ink systems tend to produce faintly visible dot patterns on photos, though it has to be said that the Canon i80's output is still remarkably smooth. We chose a test image with highly saturated primary colours, a full range of tones and good fine detail. Output speed is important, and some of these printers may work faster when printing directly, but our test prints were made from the computer, which is how we envisage most people using them.

WHAT TO LOOK FOR

- * Borderless printing: some printers are true borderless models; others require special paper with tabs you tear off later.
- * Media costs: inkjets cost a lot to run, so look for models which offer 'transparent' costs (known costs per print).
- * Memory card slots: very convenient for computer-less printing, but also useful as card readers for your computer.
- * PictBridge compatibility: allows direct printing, via cable, from PictBridgecompatible digital cameras.

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Price £1.270 Phone 08705 143723 Web www.canon.co.uk

The Canon EOS 20D is a well-built, comprehensively-featured SLR that performs almost faultlessly. Superb. Virtually all the improvements from the 10D are worthwhile; images are sharp, punchy and those taken at higher ISO settings greatly improved, and the camera handles like a dream. We have no criticism of any consequence.



Score Is	sue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
94%	27	8.2MP	n/a	1/8,000	100-3,200	n/a	n/a	None	A/M	12m

Your next best options



Nikon D70 Phone 0845 4500 155 Web www.nikon.co.uk

The camera that Nikon fans have been waiting for doesn't disappoint. The D70's images may need more work than the average compact's, especially in dull lighting, but the underlying quality is very good. The camera itself is excellent - well specified and well designed digital SLR at a remarkable price.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
93%	20	6MP	4 X	1/8,000	Auto/200-1600	f3.5-4.5	18-70 mm	None	P/A/S/M	11m



Panasonic Lumix LC-1 Phone 0870 300 1515 Web www.panasonic.co.uk

The perfect tool for the thinking photographer and a reminder of how simple and direct cameras can, and should, be. The LC-1 doesn't beat the others on features or specifications. Its qualities are harder to define, and based around design, handling and 'feel'.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
91%	23	5MP	3.2 X	1/4,000	Auto/100-400	f2.0-2.4	7.0-22.5mm	16MB	P/A/S/M	4m



Konica Minolta DIMAGE A2 Price £650 Phone 01908 200 400

Web www minolta co uk

The image quality isn't the best, but it's a superb all-round package. If you buy a camera you don't like, however, it doesn't matter how good the image quality is. The A2's results are very good but maybe not the best, but its handling, design and value are really rather special.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
90%	20	8MP	7X	1/400	Auto/64-800	f2.8-3.5	7.2-50.8mm	32MB	P/A/S/M	3.8m



Konica Minolta DIMAGE A1 Price £500 Phone 01908 200 400

Web www.minolta.co.uk

A revamped favourite, rather than an all-new camera. The DiMAGE 7/7i/7Hi was such a good camera that a giant leap forward would always be difficult. The A1 is a well-judged refinement, but it still can't quite match the responses of a digital SLR, though.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
90%	14	5MP	7X	1/16,000	Auto/100-800	f2.8-3.5	-	16MB	P/A/S/M	3.8m



Sony DSC-F828 Price £630 Phone 0870 511 1999 Web www.sony.co.uk

New levels of image quality, plus a lens and design to die for. The Sony F828 is better than anything else in its market. The only problem is the competition from a new generation of sub-£1,000 DSLRs. Is it king of the beasts or last of the dinosaurs?

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
90%	18	8MP	7X	1/3,200	Auto/64-800	f2.0-8.0	7.1-5.1mm	No	P/A/S/M	-



Olympus C-8080

Price £550 Phone 0800 072 0070 Web www.olympus.co.uk

Olympus's new 8-megapixel flagship is good, but so are its rivals. There are now five 8MP cameras to choose from. In terms of specifications, image quality and price, they're too close to call. It all comes down to brand loyalty, pricing and how it feels. The image quality doesn't disappoint.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
90%	21	8MP	5X	1/4,000	Auto/50-400	f2.48-3.5	7.1-35.6 mm	32MB	P/A/S/M	5.3m



Canon EOS 300D

Phone: 0800 616 417 Web: www.canon.cco.uk

The camera's good, and the price is a breakthrough. You could complain about the plastic finish, or the lack of a feature here or there, but the image quality, handling and responsiveness are first-division stuff. £800? Stunning. The EOS 300D bursts through the price/performance envelope.

Score Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
88% 14	6.3 MP	-	1/4,000	100-1600	-	-	None	P/A/S/M	12m

INSIDE

105 SLRs sub-£1,000 Best option for quality photos

107 ENTHUSIAST <£470 Well-featured hobby compacts

108 COMPACTS <£350 Entry-level enthusiast models

110 COMPACTS < £200 Basic models lacking controls

111 MARKETPLACE Dealer advertiser listings

Note: we list latest approx. street prices, for guide purposes. Discounts often available so do check

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Simple Impartial Advice

Enthusiast £200-£470

These high-end compacts/low-end prosumer models are ideal enthusiast cameras. They boast good photo performance and manual controls

Panasonic Lumix DMC-FZ20

Price £450

Phone 08705 357357

Web www.panasonic.co.uk

The optics and build quality are pro level; only sluggish handling and questionable focusing hold it back. This is built to last, has great manual features and image quality lives up to its breathtaking lens. It's not the fastest or simplest camera, but it's one you'll never regret buying.



Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
91%	27	5MP	12X	1/2,000	Auto/80-400	f2.8	36-432mm	16MB	P/A/S/M	7m

Your next 5 best options



Fujifilm FinePix \$7000

Price £350 Phone 0207 7586 1477 Web www.fujifilm.co.uk

what matters due to the quality of other factors (like lens) and the S7000 demonstrates this well. Images look great with excellent fine detail. A nice, satisfying camera.

Impressive. Fujifilm has long insisted that outright pixel counts aren't

from the 6-megapixel Super CCD SR. The F810's qualities aren't apparent

from its specs sheet or its price tag, but it's an excellent pocket camera for

This camera is a gem. It's a wonderfully made and satisfying camera to

use. The image quality is high although there's some evidence of noise

Slightly bulkier than the older C-5050 and the new control wheel is a

bit fiddly but this is one of the most desirable high-end compacts on the

The Mavica's a big camera but that proves to be the only drawback. Price,

performance and photographic controls are all competitive. Good indoors,

and barrel distortion. Design and handling are on a par with cameras twice

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
91%	16	6.3MP	6X	1/2,000	160-400	f2.8-3.1	-	16MB	P/A/S/M	3m
Fujifil	m Fin	ePix I	F810	Excelle	nt, rich image	quality v	vith wide a	dynamic ra	ange. Goo	d detail



Fujifilm FinePix F810 Price £380

Phone 0207 7586 1477

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Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range	
89%	27		4X	1/2 000	Auto/80-800	f2 8-5 6	32 5-130mm	16MR	P/A/S/M	4m	



Fujifilm FinePix S5000 Price £240

Phone 0207 7586 1477 Web www.fuiifilm.co.uk

		,								
Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
89%	14	6MP	3X	1/2,000	160-400	f2.8	-	16MB	P/A/S/M	5 m



Olympus C-5060 Wide

Price £315

Phone 0800 072 0070 Web www.olympus.co.uk

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
87%	17	5.1MP	4X	1/1,400	Auto/80-400	f2.8-4.8	5.7-22.9mm	32MB	P/A/S/M	3.7 m

market, with a much improved zooming range.



Sony Mavica CD500 Price £470

Phone 08705 111 999 Web www.sony.co.uk

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
87%	15	5MP	3X	1/1,000	Auto/100-400	f2.0-2.5	-	156MB	P/A/S/M	5 m

outdoors and capturing skintones.

KNOW YOUR LENS SYSTEM

When shopping for digital SLRs, you're effectively limited to one of two lens systems Canon or Nikon. Only Canon makes Canon-compatible digital SLRs. The one we like is the EOS 300D, available for around £675. It's extremely well built, very capable and gives excellent results from its 6-megapixel CMOS chip. Like most other digital SLRs, it has a focal multiplier of around 1.6.

2LOOK FOR CHOICE

If you go for a Nikoncompatible system, you've got a lot more choice. Nikon produces its own digital SLRs, but you can also get Kodak and Fuiifilm cameras that are Nikon compatible. The D100 offers 6MP resolution but, at current prices, it suffers in comparison to Canon's FOS 10D. To complicate matters further, the market has been shaken up by the release of Nikon's D70.

3THINK ABOUT PIXELS

Fujifilm's FinePix S2 Pro is a favourite among professionals, for its value, robustness, Nikoncompatibility and image quality. It uses a 6MP SuperCCD, which produces 12MP files. These aren't as sharp as a true 12-megapixel camera's images, but they're superior to other six megapixel digital SLRs.

Good alternatives

Make/Model	Price	Website	Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
Olympus C-750UZ	£315	www.olympus.co.uk	86%	14	4MP	10X	1/1,000	Auto/100-400	f2.8-3.7	-	16MB	P/A/S/M	-
Fujifilm FinePix F710	£287	www.fujifilm.co.uk	84%	24	6.2MP	4X	1/2,000	160-400	f2.8-5.6	7.2-28.8mm	16MB	P/A/S/M	3 m
Panasonic Lumix DMC-FZ10	£395	www.panasonic.co.uk	83%	17	4MP	12X	1/2,000	Auto/50-400	f2.8	6-72mm	16MB	P/A/S/M	4 m
Pentax Optio 555	£300	www.pentax.co.uk	83%	16	5MP	5X	1/2,000	Auto/64-400	f2.8-4.6	7.8-39mm	16MB	P/A/S/M	5.2 m
Fujifilm FinePix F610	£200	www.fujifilm.co.uk	82%	18	6.3MP	3X	1/2,000	Auto (125-400) 200-800	f2.8-4.9	7.7-23.1mm	16MB	P/A/S/M	2.6 m
Casio Exilim EX-P600	£400	www.casio.co.uk	81%	22	6.4MP	4X	1/8,000	Auto/100-400	f2.8-4.0	7.1-28.4mm	9MB	P/A/S/M	2.9 m
Fujifilm FinePix S20	£430	www.fujifilm.co.uk	81%	21	6.2MP	6X	1/1,000	160-400	f2.8-3.1	7.8-46.8mm	16MB	P/A/S/M	3 m
Sanyo Xacti VPC-C1E	£390	www.sanyo.co.uk	78%	19	3.2MP	5.8X	-	-	f3.5-3.7	5.8-33.8mm	128MB	Р	-
HP PhotoSmart 945	£250	www.hp.com/uk	77%	16	5MP	8X	1/2,000	Auto/50-400	f2.8-3.1	-	32MB	P/A/S	3 m
Canon PowerShot S1 IS	£345	www.canon.co.uk	75%	21	3.2MP	10X	1/2,000	Auto/50-400	f2.8-3.1	5.8-88mm	32MB	P/A/S/M	4.2 m

Compacts £200-£350

Decent entry-level cameras for beginner enthusiasts, or useful pocketsized backups for more experienced photographers

Panasonic Lumix FZ3

Price £350

Phone 08705 357 357 Web www.panasonic.co.uk

The FZ3 is small but the optical system is fantastic, producing some great pictures. Those worried about the resolution might want go for the 5MP FZ20, but the results are very good for a 3.1MP camera.



Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
84%	24	3.3MP	12X	1/2,000	Auto/80-400	f2.8	4.6-55.2mm	16MB	P/A/S/M	4.6 m

Your next 5 best options



Fujifilm FinePix F700 Price £200 Phone 0207 7586 1477 Web www.fujifilm.co.uk

The HR SuperCCD does exactly what it says. The extended dynamic range isn't this camera's only merit. It's also an extremely well made, well designed camera that's a pleasure to use. A handy second compact camera for enthusiast photographers.

		,		:	•	0 1				
Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
83%	13	6MP	3X	1/2,000	160-400	f2.8	-	16MB	P/A/S/M	5 m



Pentax Optio S4 Price £219 Phone 01753 792 792 Web www.pentax.co.uk Picture quality is the only disappointment with this camera but even then it's pretty minor. Clever design, great build quality and tiny dimensions make this a perfect go-anywhere camera.

A tendency towards overexposure and iffy white balance take the edge off

the FX-5's ratings, but it's a nice camera and the image stabiliser and high

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
83%	17	4MP	3X	1/2.000	Auto/50-200	f2.6-4.8	5.8-17.4mm	11MB	P/S	_



Panasonic Lumix DMC-FX5 Price £200

Phone 08705 357 357

	www.p		nic.co.uk							
Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range



Kyocera FineCam M410R Price £300 Phone 0118 933 7000 Web www.kyocera.co.uk

82% 19 4MP

Quibbles over the LCD control layout aside, this is an excellent camera for action shots with its 10 x zoom range. If you can pick this up for £300, it's an excellent buy.

Auto/50-200 f2.8-4.9 5.8-17.4mm 16MB

-		cco	AD =		100					-1 1 5
Score	issue	CCD	OP. Zoom	Max Shutter	150	Aper	Focal	Memory	Modes	Flash Kange
82%	23	4.1MP	10X	1/2,000	Auto/100-800	f2.8-3.1	5.7-57mm	None	P/A/S	4 m



Minolta DIMAGE Z1 Price £200 Phone 01908 200 400 Web www.minolta.co.uk

A bit plasticky and gimmicky but it's a serious, competently-designed and competitively-priced camera combining high end features and very creditable performance.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
81%	17	3.2MP	10X	1/1,000	Auto/50-400	f2.8-3.5	5.8-58mm	16MB	P/A/S/M	6.1 m

CHOOSING A FLASH

BUILT-IN VS EXTERNAL

The chances are that your digital camera came with a built-in flash. This will be a comparatively lowpowered unit, designed for automatic use on subjects just a few feet away. They all suffer from the same flaws - harsh, front-on lighting, and a limited range. External flashguns offer greater power and flexibility. However, there's no such thing as a universal flashgun and only the more expensive digital models have accessory shoes for attaching them.

2KNOW YOUR FLASHES

Cameras that do accept external flashguns are limited to the maker's own dedicated models. For example, if you own a Nikon CoolPix 5700, you'll need to use Nikon Speedlight flash units like the SB-30 or SB-80DX. Flash power is worked out using a guide number. You divide this number by the distance in metres to your subject. Then, in order to work out the lens aperture, you need to set the correct exposure at ISO 100

3BENEFITS OF FLASHGUNS

Not only do they offer increased power for longer-range shooting, but as an added bonus, by not using your camera's internal flash, you'll reduce the camera's overall battery consumption. If you decide to go for a flash with a swivelling head, you'll be able to bounce the light off a ceiling or a reflector to produce a much softer, naturallooking light.

Good alternatives

Make/Model	Price	Website	Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
Kodak DX6490	£240	www.kodak.co.uk	81%	15	4MP	10X	1/17,000	Auto/80-800	f2.8-3.7	-	16MB	P/A/S/M	4.9 m
Konica Minolta DiMAGE G600	£250	www.konicaminolta.co.uk	80%	23	6.4MP	3X	1/2,000	Auto/50-400	f2.8-4.9	8-24mm	16MB	P/M	3 m
Canon PowerShot S60	£340	www.canon.co.uk	80%	24	5MP	3.6X	1/2,000	Auto/50-400	f2.8-5.3	5.8-20.7mm	32MB	P/A/S/M	4.2 m
Samsung Digimax V50	£280	samsungcamera.co.uk	75%	24	5MP	3X	1/12000	Auto/50-400	f2.7-4.9	7.7-23.1 mm	32MB	P/A/S/M	43m
Kodak DX7630	£260	www.kodak.co.uk	79%	23	6.2MP	3X	1/1,400	Auto/100-800	f2.8-4.8	-	32MB	P/A/S/M	4.2 m
Sony DSC-W1	£250	www.sony.co.uk	77%	25	5MP	3X	1/1,000	Auto/100-400	f2.8-5.2	_	32MB	-	3.8 m
Canon Digital Ixus 430	£250	www.canon.co.uk	74%	22	4MP	3X	1/2,000	Auto/50-400	f2.8-4.9	7.2-22.2mm	32MB	Р	3.5 m
Nikon CoolPix 5200	£250	www.nikon.co.uk	72%	25	5.1MP	3X	1/2,000	Auto/64-400	f2.8-4.9	-	12MB	-	-
Casio qv-r51	£200	www.casio.co.uk	72%	19	5MP	3X	1/2,000	Auto/50-400	f2.8-4.9	8-24mm	9.7MB	Р	3.2 m
Casio Exilim EX-Z40	£245	www.casio.co.uk	70%	26	4.2MP	3X	1/2,000	Auto/50-400	f2.8-4.8	5.8-17.4 mm	9.732MB	P/S	3.4 m

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NIKON 4800 4 million pixels = 8.3x optico lens = 15x score modes.



NIKON 5700



NIKON 5400 5 million pixels = 4x optica lens = 28-115 aquivalent.



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FUJI E550

PENTAX

optio S5i 5 million pierte Broptical and sliding less system e charging



PENTAX optio S50 5 million pierte 3kraptica skiting iens system + see

FUJI F810

6.3 megapinels (output 1.z million poets = 4coptical z



Dimage A2



Dimage A1



Dimage G600



Dimage G530



Dimage X50



Dimage XG



■ Dimage X31



Dimage Z3



Dimage Z10



Dimage A200



Exilim Zoom EX-Z55



CASIO Exilim EX-S100



CASIO Exilim Pro EX-P700





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Compacts £120-£200

Useful entry-level models for people who want point and click cameras capable of decent results in a range of typical conditions

Ricoh Caplio R1

Price £200

Phone 0208 261 4031 Web www.ricohmmc.com

Few digital cameras are really surprising. This one is - the ugly duckling that was the old Caplio, has become a swan! For £200, there is simply no other camera with this speed, versatility and quality.



Score Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
93% 26	4.2MP	4.8X	-	-	f3.3-4.8	4.6-22.2mm	12MB	P/S	-

Your next 5 best options



Pentax Optio 33WR

Price £192 Phone 01753 792 731 Web www.pentax.co.uk The Optio 33WR hits the nail on the head in so many unexpected ways. Sharp optical results, well exposed pictures and a chunky and tough, versatile build make this almost the perfect family camera.

The image quality is good, the design and build are excellent and, with

Looks fantastic and does a pretty good job too. It's for those who prefer an

Audi to a Ford, and yet it's not that expensive with 4 megapixel resolution

A very nice little camera with some smart touches, great battery life and

Good, if not perfect image quality but it's a lot of camera for the money.

It adds a real touch of class to the HP range and it squares up well against

an attractive price tag. The only problems is colour fringing. It deserves to

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
88%	15	3.2MP	2.8X	1/2,000	Auto/100-400	f2.8-3.9	-	-	P	-
				_						



Pentax Optio S30

Price £120 Phone 01753 792 731

that in mind, the value is terrific, too. The picture quality it produces is first-rate. Yes, you can get cheaper cameras than this, but they feel cheap, Web www.pentax.co.uk too, and they're bigger and bulkier to carry around

and decent photographic controls. A perfect gift camera.

cameras from the more obviously photographic names.

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
87%	25	3.2MP	3X	1/2,000	Auto/50-400	f2.6-4.8	-	11MB	-	2.0 m



Canon Digital Ixus i

Price £220 Phone 0800 616 417

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Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
85%	16	ANAP	_	1/1 500	Auto/50-400	f2 8	6.4mm	32MB	P	2 0 m



Panasonic Lumix LC70

Price £177

Phone 0870 300 1515

Web www.panasonic.co.uk/lumix

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
82%	22	4.2MP	3X	1/2,000	Auto/50-400	f2.8-4.9	5.8-17.4 mm	16MB	Р	4.8 m



HP PhotoSmart R707

Price £220 Phone 08705 474747

Web www.hp.com/uk

Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
80%	22	5.3MP	3X	1/2,000	Auto/100-400	f2.8-4.9	8-24mm	32MB	Р	3 m

NEED ONE

For night-time, macro, portraiture, sports and wildlife photography, tripods will help you get shake-free shots. They also have other benefits mounting a camera on a tripod fixes your viewpoint, locking the composition, and leaving you free to concentrate on exposure, filters and your moving subject.

2CHEAP VS EXPENSIVE

A cheap tripod is better than none, and one light enough to carry around will do a lot more good than one so heavy you'll usually leave it at home. For casual snapping, look at spending £20-£30 and only graduate to a more expensive model when the shortcomings of the one you've got become obvious.

3 DEGREES OF MOVEMENT

Cheap tripods will come with a pan-and-tilt head, but with the more expensive models you usually have to buy the head separately. Pan-andtilts offer separate movements on the horizontal and vertical axes. This can be useful when panning shots of motor racing, for example. Ball-and-socket heads allow complete freedom of movement around both axes. There are no sticking-out handles and they lock with a single knob. These are usually only available with the more expensive models.

Good alternatives

Make/Model	Price	Website	Score	Issue	CCD	OP. Zoom	Max Shutter	ISO	Aper	Focal	Memory	Modes	Flash Range
Olympus mju 400	£150	www.olympus.co.uk	80%	13	4MP	3X	1/1,000	Auto (80-320)	f3.1-5.2	-	16MB	P/S	4 m
Kyocera Finecam S5R	£200	www.kyocera.co.uk	79%	14	5MP	3X	1/2,000	Auto/100-800	f2.8-4.8	-	16MB	P/A	2.5 m
Canon PowerShot A85	£230	www.canon.co.uk	79%	26	4MP	3X	1/2,000	Auto/50-400	f2.8-4.8	5.4-16.2 mm	32MB	P/A/S/M	2.5 m
Ricoh Caplio G4 Wide	£130	www.ricoh.co.uk	79%	18	3.2MP	3X	-	-	f2.6-4.3	4.2-12.7mm	8MB	Р	-
Sony DSC-U50	£190	www.sony.co.uk	78%	16	2MP	Fixed	1/2,000	Auto	f2.8	5 mm	8MB	Р	1.8 m
Konica Minolta X31	£150	www.konicaminolta.co.uk	78%	25	3.2MP	3X	1/500	Auto (50-200)	f2.8-4.7	-	16MB	-	3.6 m
Nikon CoolPix 3700	£210	www.nikon.co.uk	75%	18	3.2MP	3X	-	Auto (50-200)	f2.8-4.9	5.4-16.2 mm	16MB	-	3 m
Nikon CoolPix 3200	£140	www.nikon.co.uk	70%	21	3.2MP	3X	1/3,000	Auto	f2.8-4.9	5.8-17.4 mm	145MB	Р	3 m
Samsung U-CA 4	£200	www.samsung.co.uk	68%	26	4.2MP	3X	1/1,200	Auto/100-400	f2.8-4.8	5.8-17.4 mm	32MB	P/A	3 m
Kyocera Finecam L3v	£200	www.kyoceracameras.co.uk	66%	18	3.2MP	3X	1/2,000	Auto/100-400	f3.5-4.4	5.8-17.4 mm	16MB	P/A	2.5 m

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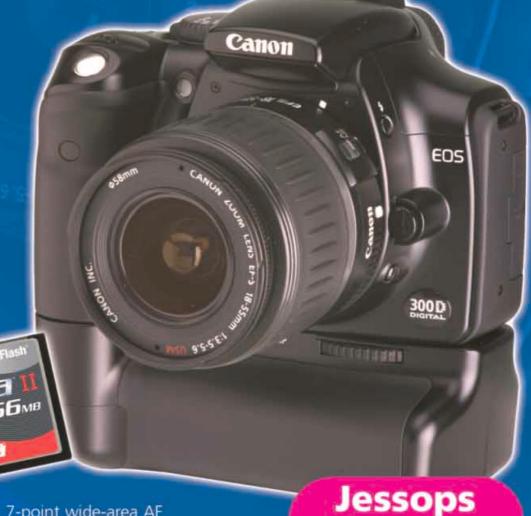
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Jessops Kamala

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Compact case large
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Action bag small
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Action bag medium
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Backpack
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Jessops Monaco

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Action bag medium	
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360mm x 195mm x 185mm£49.99	j.
Compact case small	
125mm x 80mm x 40mm£7.99	F
Compact case medium	
150mm x 80mm x 45mm£8.49	j.
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Rezo Brushed tricot anti-scratch lining. Unusual inside-out zip creates

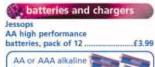
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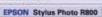
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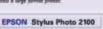
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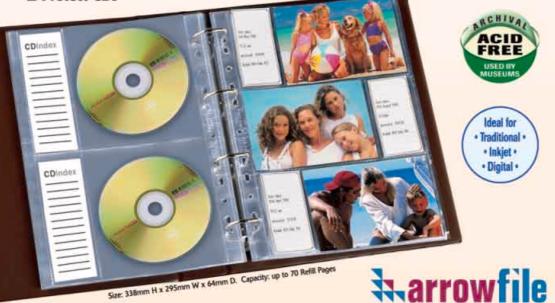
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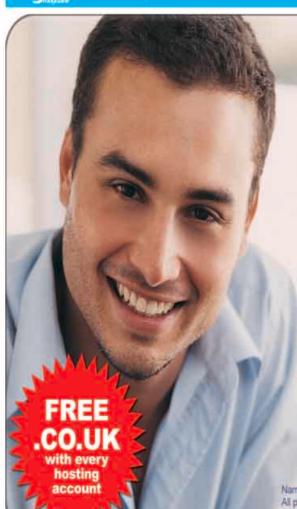
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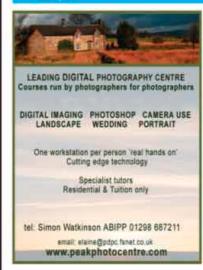








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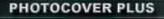




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Your mission

In November, **your mission** was to capture 'Happiness'. Here are the best entries:



James Gentle

Just Married My cousin asked me to be the photographer at her wedding this June. I took my role very seriously, even climbing a tree to gain the best vantage point. The day was a very relaxed affair, with the service conducted on a small island on a lake. This shot I feel captures the couple's true happiness as they walked newly married back to the reception. I used my Canon PowerShot G3 with 1/1,250 sec shutter speed, f/4.0 and ISO 100.

This is a lovely candid wedding shot – I hope your cousin appreciates the effort you put in. I do feel the post-shot background blur is a little overdone, though - the girls look like two ghosts!

Write in and win this! BRAND NEW £330 HI-TI PHOTO

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Liam Helm

Greece win! Greek fans celebrate their Euro 2004 victory. This shot was taken while on honeymoon in San Stefano, Corfu, using a Nikon D70 with an 18-70mm lens. Exposure was 1/400 sec at f/3.8. At first glance, the protagonists in this shot don't look all that happy. It isn't until we discover the reason for the party that all becomes clear. Composition could have been a little better - if you had walked to the right a bit, you could have achieved better composition and an improved sense of depth to the image. This shot doesn't work for me at all. You

can barely make out what's going on, the composition is weak, and there's nothing in the frame to anchor it to a

Peter Whelan

particular time and place.

Evie's mum wanted me to take some candid shots of her playing in the garden. I took this with an ${\sf S2}$ Pro Nikon, 50mm lens, f/1.8, shutter speed 1/3,000 sec. Adam says This is the kind of shot that a family will treasure for years to come. It's nice and sharp, with plenty going on and you've caught a great expression. This is a great little action shot that captures the sheer delight of the subject as she defies gravity. It makes me want to get my own mini trampoline! The only thing missing is eye contact.

Honourable mentions



My grandson and a friend enjoying life.

The crazy angle and oversaturated colours make this shot feel like a 1970s television advertisement. It's a great effect. Composition would be improved by sitting the boys closer together, in order to avoid the triangle of wasted space at the top.



This is a shot I took in the busy street of Chaweng in Koh Samui, Thailand. As you can see, the heavens had opened and the girls on this bike were soaked through but still laughing about it. Adam says: It's a nice reportage shot in that it captured the expression really well, but it would have worked better with more of the frame filled by the bike rider.



The photograph was taken with a Fujifilm FinePix 6900 Zoom digital camera in my back garden to capture the moment of supreme happiness a child experiences when dropping snails into an empty watering can.

Although it's not obvious what's going on, it's clear that he's enjoying himself. The foliage in the foreground gives us a feeling that we're spying on his private snail-dropping world...

Check out this month's mission...



This month, your mission is to shoot the theme of 'Greed'. We want lots of different ideas and approaches, so to give you an idea, here's a selection. No winners here, but you might do better and win a photo printer. Good luck!



Andrea Thompson

Name of picture: One banana, two banana... This is a cracking wildlife shot that combines great technique, colour, humour and emotion. Aside from the impressive number of bananas the orang-utan has crammed into his mouth (we'll assume it's a he!), what makes it for me is the uncannily human-like expression of guilt on his face – he looks like a naughty child! I have to admit I'm also a total sucker for these adorable creatures...

<u>WHAT WE DON'T WANT!</u>

We want you to think creatively about this Mission. Go beyond the obvious and give us something genuinely interesting. Any of the following will be instable before the control of the con instantly binned! Big plates of food, chocolates, piles of cash, children with their mouths full..





s you will know from reading last month's Mission, we've changed the emphasis of this section to themes, rather than specific subjects. Last issue, we challenged you to send us shots on the theme of 'Age'. We'll be printing the results next issue.

In the meantime, this issue's Mission is based around the theme of 'Greed'. Whether you choose to interpret the brief literally or metaphorically is up to you. On this page, we've chosen examples of both good and bad shots. We're sure you can do better...



How to send your pics

Send your images to us and we'll give you our honest (but constructive) opinion. One picture per email, no bigger than 1.5MB, please. Deadline: 2nd January 2005 Email your shots to: editor.dcm@futurenet.co.uk



Rod Lawton

Hands up! Along with the soft focusing and grainy texture, shooting in black and white and using undiffused, high-contrast lighting helps to reduce the hands and fingers to striking abstract forms. This image could also be interpreted on an emotional level, with the hands clamouring for attention, reaching out for help or greedily grabbing all they can...

Adam Evans

Gambler's paradise

We're not suggesting you fly all the way to Las Vegas in order to reproduce this shot, but the way it represents a whole way of life in one image is interesting. The sign is bright, brash but also a little seedy and down at heel – much like Las Vegas itself.



corners of your mouth (the lip line). Then draw a horizontal red line connecting both your pupils (pupil line). Finally, connect those two lines with a vertical red line from the centre of the lip line to the centre of the pupil line (facial vertical line)

size the Mask over the photo of your face. You can either use the Mask as a guide for make up on a photo shoot, or you can try using Photoshop's Transform tool to shape the proportions of your face so it fits the grid better. Why not try it and send us your results at editor.dcm@futurenet. co.uk? We'll print the best.

Elements. Do the same with your digital

How the beauty mask works

All attractive faces have similar proportions. The mask's lines reveal where they are. Compare this shot of a model with a shot of someone closer to the average

PERFECT FIT

This photo shows how all the key facial features fit the grid perfectly. The closer a person fits this grid, the more attractive most people will consider him or her to be.

Y AXIS

A face that is symmetrical along the Y axis is considered more attractive than an asymmetrical face.

The pupils appear at the intersection of lines in a decagon created using the 'Golden Mean', or 'Divine Ratio, proportion of 1.618:1, called 'Phi'.

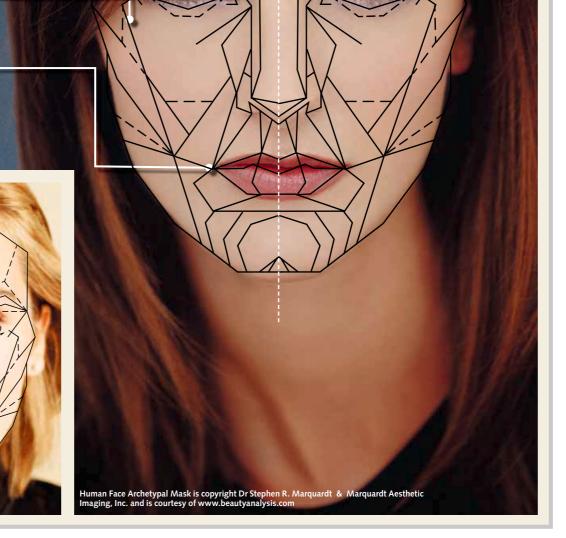
CHEEKBONES

The lines of the cheeks correlate to Phi-based decagons sited within the main Golden Decagon

MOUTH

There is a precise mathematical relationship between the position of the mouth, nose, cheeks and chin.

In this picture, more facial features lie outside the mask's guidelines, which means their features do not follow the golden ratio as closely

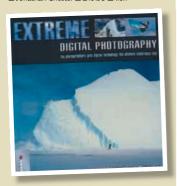


Essential reading for Christmas

Extreme Digital Photography

What do you get when you give a digital camera to a bunch of lunatics who prefer yomping across arid and dangerous landscapes to staying at home tucked up in bed? A book full of photography, from deserts to the Arctic, from extreme weather to undersea exploration. The supporting text is surprisingly practical though, with a mix of interviews including key camera settings used, to quick tips and ideas. Considering the subject matter, the photography is a bit of a let-down though, with it often tending towards the practical rather than the inspirational.

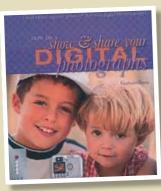
■ Jonathan Chester ■ £19.95 ■ Ilex



How to show & share your digital photographs

Aimed at a family - and from the look of the colours and fonts - a female readership, this book is about the answering the question, 'now I've got the shot, now what?' Basic photo fixits are explained, but the emphasis is more about printing projects, creating digital albums and uploading to the Web, than on anything photographic. A bit basic for more experienced digital photographers.

■ Graham Davis ■ £14.95 ■ Ilex





SPOTTED!

Swedish Santas

or some reason the mother in this photo doesn't appear too happy to be spending her journey with several Santas.

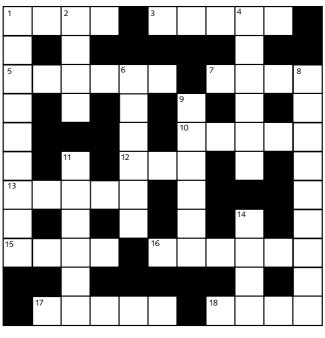
The Swedes take Christmas very seriously and the scene in this shot is probably not unusual around this time of year. These Santas were pictured on a train in Stockholm, on their way to

Gallivare in Swedish Lapland, a freezing winter resort 60 miles north of the Arctic circle.

There they'll be taking part in the annual Santa Winter Games, Santas, both male and female from all over Sweden take part, with disciplines ranging from parcel wrapping to porridge eating. ■



LAST MONTH'S WINNER Pete Beardsall, Clapham. "I'll hold him down while you go for the neck."



CHRISTMAS CROSSWORD

ACROSS

- Owing money (4)
- Piles of delicious food (5)
- Essential body organs (6)
- Festive shorthand (4)
- 10 Brains behind Photoshop (5)
- **12** Small measure of liquor (3)
- 13 Pictorial reproduction (5)
- **15** Information (4)
- **16** 2.5 cm not a mile (6)
- **17** We wish you a -----Christmas (5)
- 18 An elaborate party (4)

DOWN

- 1 Old fashioned term for turning film into photo (9)
- 8 bits (4)
- Something that represents something else (6)
- Unwanted pattern in a JPEG (8)
- A greatly impressive event (8)
- 11 Contains booze (6)
- 14 Sheds needles over the carpet (4)

DON'T

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LAST MONTH'S ANSWERS
ACROSS: 1. Cosmetic 5. Hoax 6. Beauty 8. Tutorial 10. Wideopen 13. Anorak 14. Wrap 15. Gluttony DOWN: 1. Coast 2. Elevated 3. Ixus 4. Whiten 7. Artifact 9. Canopy 11. Party 12. Tool

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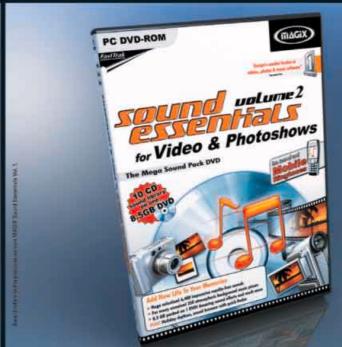
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Digital Camera Shopper, October 2003: Rating: "4/6"
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"The camera has to have timing, too"

Pro photographer Matt Stuart knows that a great shot can pop up anywhere, even in a badly-lit shopping centre. This is where the FinePix E550 Zoom comes in; an agile digital camera with the body of a compact and the attitude of an SLR. You never know, you may even encounter one on your next shopping trip...

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FinePix E550 zoom

